Center for International Scholarship in School Libraries (CISSL)

ONE COMMON GOAL: STUDENT LEARNING

Report of Findings and Recommendations of the New Jersey School Library Survey Phase 2

School of Communication and Information
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On behalf of the

New Jersey Association of School Librarians (NJASL)

USA

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1. Background of Research

This report documents the findings and recommendations of Phase 2 of the research study commissioned by the New Jersey Association of School Librarians (NJASL) in 2009 and undertaken by the Center for International Scholarship in School Libraries (CISSL) at Rutgers, The State University of New Jersey, School of Communication and Information (SC&I). The overall research agenda (Phases 1 and 2) seeks:

(a) to construct a picture of the status of New Jersey's school libraries in the educational landscape of New Jersey;

(b) to understand the contribution of quality school libraries to education in New Jersey;

(c) to understand the contextual and professional dynamics that inhibit and enable school libraries to contribute significantly to education in New Jersey, and

(d) to make recommendations to NJ stakeholders to develop a sustained and long term program of capacity building and evidence-based continuous improvement of school libraries in New Jersey.

Phase 1 of this research program, released in September 2011, provides a comprehensive picture of the status of public school libraries in New Jersey: their infrastructure, personnel, resource and information technology provision, and the instructional and administrative work of the school librarians. This phase of the study used a voluntary online survey to collect data from 765 school librarians from all counties of New Jersey. The sample comprised 30% of the schools in New Jersey. Specifically, Phase 1 of the study collected a comprehensive body of data based on 103 survey questions on seven aspects of schools and their school libraries:

- *Part 1: Contact information and school details.* Data included demographical and descriptive information of participating schools.

- *Part 2: School library staff.* Information included: levels of certification of school librarians; number and level of staff—both professional librarians and support staff; full and part-time status of staff; technology support.

- *Part 3: Teaching activities in the school library and professional activities.* Data included: the number of cooperations, coordinations and collaborations that occur during the academic year between school librarians and classroom teachers; the main foci of information literacy instruction, including identification of instructional

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activities related to effective use of information technology; student learning outcome(s) enabled by the school library program and priorities for change and continuous improvement of school library programs.

- *Part 4: Reading and related activities in the school library.* Data included the nature of reading/writing/literacy initiatives during the previous school year.

- *Part 5: Administration of the school library.* Data identified the range of administrative tasks (e.g., selection, ordering, processing library materials); supervision of paraprofessional /student / volunteer aides; maintenance of equipment; non-library duties (e.g., building assignments); the library collections, including materials in print, digital and other formats; additions to library collection in last school year; extent and frequency of weeding; extent of technology, including AV and computer hardware available to students in school library; availability of local and remote access to an automated catalog; access to the Internet; existence and functionality of a school library web site; availability of subscription databases; availability of applications (e.g., Microsoft Office applications such as Word, PowerPoint, and Excel), production software (e.g., computer-assisted instruction), educational software; audio-visual materials (e.g., video, DVD, and CD); and availability and use of interlibrary loan from local and regional libraries.

- *Part 6: School library access.* Data identified type of library access availability for student use.

- *Part 7: School library budget.* Data identified budget allocation, sources and trends.

In addition to the survey questions, data were also collected from analysis of *TitleWise*, a database created by Follett Library Resources that contains descriptive statistics of book collections in participating school libraries. School librarians who are not users of the Follett Library Resource's *TitleWise* database responded to additional survey questions about their book collections. This provided us access to an extensive body of accurate school library collection data.

As summarized in the Executive Summary of Phase 1 report, this study concluded that school libraries are a vital and important part of New Jersey's schools. The findings showed that New Jersey school libraries and the work of school librarians contribute in rich and diverse ways to the intellectual life of a school, and to the development of students who can learn and function in a rich, complex and increasingly digital information environments. It concluded that school libraries in New Jersey that are staffed by certified school librarians provide common information grounds for supporting learning across the school through engagement with information, with particular emphasis on developing students' abilities to interact with information and to use it to learn well, and in addition, is a critical dimension in supporting reading and literacy development in the schools. This contribution is underpinned by an

information and technology infrastructure and enabled through strong instructional, service, and administrative roles of school librarians.

In this Phase 1 study, it was found that the instructional role of school librarians was a predominant characterization of the school library landscape in New Jersey. The large numbers of collaborations developing information literacy capabilities, as well as large numbers of cooperations and coordinations, show a strong level of engagement in teaching and learning. In a substantive number of studies done on school library collaborations, it has often been reported that low levels of instructional collaborations exist. Phase 1 of the New Jersey study documented that 19,320 cooperations, 11,179 coordinations and 3,916 collaborations were undertaken during the 2008-2009 school year. It found that on average, school librarians contributed 27 cooperations, 15 coordinations and 5 instructional collaborations with classroom teachers during the school year. More specifically, elementary school librarians contributed 14 cooperations, 6 coordinations, and 3 instructional collaborations during the school year. Middle school librarians contributed an average of 35 cooperations, 20 coordinations, and 8 instructional collaborations during the school year. High school librarians contributed an average of 45 cooperations, 32 coordinations, and 9 instructional collaborations during the school year (Phase 1 report, 104-105).

New Jersey's findings of high levels of instructional collaborations are likely to be attributed to a number of factors as identified in the Phase 1 study:

- 84.5% of the sample are New Jersey state certified school librarians, either at the master's level of certification (58.9%) or associate certification level (having completed 18 credits);
- On average, 52.5% of school libraries have some level of support staff working in the school library, freeing up time for school librarians to engage in instructional collaborations;
- Capitalizing on opportunity to interact with classroom teachers at grade level meetings, team level meetings and department level meetings when these are held in schools;
- Commitment to providing professional development to the school community: 63% of participants in the Phase 1 study were involved in the provision of professional development in relation to information literacy in their schools; 72.8% of participants are involved in the provision of professional development in relation to information technology in their schools;
- Strong commitment to information literacy instruction and a belief that this is best undertaken through collaborative partnerships with classroom teachers, with emphasis given to (a) knowing about the school library; (b) accessing information efficiently and effectively (c) knowing how to use the different sources and formats of information; (d) strategizing for finding, evaluating, and selecting appropriate sources to answer questions; (e) knowing about different sources and formats of

information; (f) using information technology responsibly(f) using information ethically (plagiarism, citation, bibliography);

- Establishing strong communication channels in their schools: 96.1% of school librarians meet with their school principal during the school year; 74.4% of school librarians meet with curriculum supervisors during the school year.

Phase 1 of the NJASL study clearly provided evidence of the contribution of the school library to the development of the whole child and to the mission of its school. The school library is portrayed as an agency for intellectual development and for the social and cultural growth of students as they grow up in a complex and diverse information world. Based on qualitative responses by 721 school librarians, New Jersey's school libraries appear to contribute to learning outcomes in six key ways:

1. Contribution to development of curriculum standards, including mastery of content standards and contribution to test score achievement.

2. The development of resource-based competencies, centering on library operations, mastery of a diverse range of information literacy competencies.

3. The development of research process and learning management competencies, centering on the mastery of explicit aspects of the research process, inquiry processes, strategies of independent learning, and research project management.

4. The development of thinking-based competencies, in particular the processes of thinking, analysis and synthesis that create knowledge and the representation of knowledge though a range of products.

5. The development of affective, personal and interpersonal competencies, including the development of positive and ethical values in relation to the use of information, increased motivation and interest for engaging with information for learning and working effectively with others in research activities.

6. Outcomes related to the development of reading, including increased interest in reading increased participation in reading, the development of wider reading interests, and becoming more discriminating readers. (Phase 1 Report pages 160-168).

In addition, responses of participants, particularly to open questions, convey a sense of strong and active commitment and participation to a whole-school team approach that works toward meeting curriculum standards, engaging students, and helping them achieve academically. This commitment extends beyond the provision of library services to embrace and support all aspects of school life. It was evident that school librarians in New Jersey utilize their professional expertise to ensure the effective functioning of a school library. The open responses of the school librarians were particularly insightful, capturing in the school librarians' own words the

richness and diversity of impact of their school libraries. The following statements capture the power of the story:

"They are mastering the use of the on line data bases and reliable sources."

"They develop their research skills- what to use when knowing when print reference is efficient, when databases are better and when to use the free internet."

"The students appear to manage the research tasks in a timely manner."

"The 4th grade students created an electronic portfolio to meet the state technology benchmark standards."

"Students have developed some higher order thinking skills, reading strategies, making connections to texts, world and self."

"Their thinking, comprehension and communication skills have been developed."

"Students demonstrate research organization, integration of new knowledge, properly crediting sources."

"Students are developing awareness of ethical issues in information and communication."

"I see positive changes in interest and motivation, not just for using the library but school work in general."

"Students have come to discover that the school library is the gateway to academic achievement through their exposure to the use of information technologies in the library, such as electronic databases, AVs etc. These have gone a long way to motivate them to learning."

"Students in some cases have achieved a calmer and more efficient attitude to their specific skills. They have found new interests to increase motivation in other areas."

"Motivation goes up, goals are easier to reach, curricula is mastered, technology becomes more helpful, and information is gained resulting in success at tasks and gain of knowledge."

"The students' attitudes towards research and literacy have improved this year. What they viewed as frustrating and insurmountable is now viewed as a "do-able" project."

"Through the school library students respect different ideas and differences with people and themselves more."

"Group research projects have taught some students how to work better together and in teams."

"Students develop both an understanding and an appreciation for different types of fiction and non-fiction. This is motivational in that it broadens attitudes and interests."

These stories have played an important role in shaping the methodology of Phase 2 of the NJASL study. In qualitative research, the story, as a pattern, is regarded a powerful way of organizing and sharing individual experience and for creating shared understandings and realities. As shared patterns, stories go beyond the individual to the collective, and enable us to make sense of individual stories, stepping outside the immediate context to a shared context. This is elaborated further in this report.

2. Goal of Phase 2

Building on Phase 1, the goal of Phase 2 of the research was to examine the dynamics of a selected sample of effective school libraries to establish the outcomes and opportunities for school libraries in New Jersey, and to establish the key inputs (both library and school-wide inputs) that enable these effective school libraries to thrive and contribute richly to the learning agendas of the schools. This goal directly responds to and supports the then Commissioner Lucille Davy's question: "Show me what good school libraries in New Jersey look like."

Phase 2 of the NJASL study was conducted from September 2010 to August 2011. The time line of the study was:

Time	Activity
September 2010	Develop a typology of the characteristics of effective school libraries based on examination of data from Phase 1, coupled with insights from research literature. These formed the criteria for the selection of the participating schools.
	Selecting an initial list of 30 school libraries in New Jersey for potential in-depth analysis through a rigorous selection process, meshing typology dimensions, data from Phase 1, and state test score data, and relevant district / regional data.

October 2010	Development of focus group protocols as framework for qualitative data gathering.
	Training in focus group operation, management and documentation.
	Permissions to access schools and development of school visit schedule.
	Development and submission of Rutgers ethics (IRB) approval.
November 2010	Rutgers IRB approval granted.
	School site visits.
December 2010	Completion of school site visits.
January 2011	Preparation for transcription of audio files; technical cleanup and checking of quality of all files.
	Write up of memo notes by observers and moderators.
	Transcription of audio files.
February 2011	Transcription of audio files completed.
March 2011	Preliminary data analysis by researchers; axial coding.
April – June 2011	Detailed coding.
	Preliminary draft.
July – August 2011	Completion of draft report.

In establishing the approach to Phase 2 of the research, the CISSL team and NJASL Advisory Board considered that it was important to document the perspectives, perceptions, attitudes and values of school administrators and classroom teachers, with particular emphasis on capturing the "stories" of participants: narrative stories of their use of and engagement with the school library that "tell it like it is". These stories would, especially from teacher and administrator perspectives, give insights into how they see:

- Students using and learning through school libraries;
- Faculty attitudes / values towards school libraries;
- Faculty use of school libraries – enablers and inhibitors of library use;
- Faculty perception of impact on student learning, and sources of evidence of impact;
- School principal and administrator attitudes / values towards school libraries;
- Faculty perception of school library's impact on student learning, and evidence for impact;
- Principal / administrator support for school libraries and how it is seen to impact on learning outcomes.

Falling under the scholarly discourse of Narrative Intelligence, Mateaas and Sengers (1999) claims that a growing number of fields ranging from history to psychology, law and medicine, education to social work, have embraced the use of stories and narrative forms as an effective methodology that is able to hone in on findings not possible through traditional scientific methods in order to develop rich patterns of meaning and insights. Sandelowski (1991) posits that the narrative nature of human beings has often been lost in the data-driven research environment, yet it is these narratives that convey the richness, depth and variation of experience, and through telling and selection, are given cohesion, meaning and direction. According to Atlee (2003) of The Co-Intelligence Institute, the strengths of the use of "Story" as a data collection and presentation approach include:

- The tendency to understand things better when they are presented in the form of a story (and sometimes to have trouble understanding things when they aren't presented as stories);
- The capacity to sense the importance of context, character, history, etc., in any explanation;
- Dissatisfaction with isolated events and abstract ideas, out of context;
- The ability to sort out and describe what has happened to oneself or others, often with a richness of context and detail, and often with great relish;
- The ability and tendency to see people, places and things in terms of their function in a story;

- Resonance with the stories of others; the ability to see another's viewpoint when presented with the stories which underlie or embody that viewpoint;
- The ability to discover themes in the events of a life or story;
- The ability to recognize (or select) certain elements as significant, as embodying certain meanings that "make sense of things."

In the initial proposal to NJASL for undertaking this study, we indicated that data collection for Phase 2 would be: online survey instruments involving both faculty and students, and focus groups and interviews in selected schools, depending on emergent data from data collection instruments. Given the timeline of this research, and the ethical implications and time line of gathering data from students (including approvals from the state department of education, district approvals, and parental approvals), the decision was made to gather data from educators. Our Advisory team recommended that we focus on school educators as the source of data, and particularly in light of the logistical difficulties of getting access to students in schools and the potential disruptive nature of undertaking that process.

One of the key challenges was to establish a methodology that would enable us to capture the "story", and produce a rich body of data expressed in participants own words and context, in a time efficient and non-intrusive manner as possible, and cognizant of the intense time schedules of school. We needed a very flexible approach to data collection that could be utilized in multi-faceted environments; that was quick and inexpensive to employ and allowing for direct interaction with participants, but not compromise the potential for gathering rich and extensive data. We reviewed a range of alternative approaches: individual interviews with classroom teachers and administrators, focus group discussions, survey instruments distributed in schools, campus visits, ethnographic approaches, and a variety of documentary analysis approaches.

The decision was made, after review of data collected in Phase 1, to utilize focus groups as the primary approach to engaging with the school faculty and for the story-based data collection. As a well-established and credible qualitative approach to data collection, focus groups are defined as "a method of group interviewing in which the interaction between the moderator and the group, as well as the interaction between group members, serves to elicit information and insights in response to carefully designed questions". Because the process focuses on interactions between participants, and the dynamic nature of the questions asked by the moderator , they produce a level of insight that is rarely derived from 'unidirectional' information collection devises such as observation, surveys and less interactional interview techniques. We were also mindful of a range of benefits of focus groups, as elaborated in the qualitative research literature. These include:

- Depth of detail: "thick, rich data"; gathering the voices of participants: their conceptualizations and thoughts, reactions, as they arise naturally;

- They attempt to avoid pre-judgment: capture what is happening without being judgmental; present people on their own terms; allows researchers to build from the ground up, identify phenomena at the school level;
- They tend to get at more honest and in depth information. Superficial or patronizing responses as well as critical responses are often challenged and or put into an appropriate context;
- They often reveal fundamental differences among group members concerning the conditions of that agreement;
- Because of the participant interactions and the unpredictability of these, they tend to dig deep into complexities not possible in standard survey instruments;
- Members of focus groups feel 'listened to', and this encourages depth and breadth of input.

In planning for the composition of the focus group and the central questions to be asked, we were also mindful of some of the limitations. These include:

- They are not suited to a large suite of questions; they work best work best with small set of focus questions that enable the scope and depth of research themes to unfold;
- They have limited generalizability to a population;
- Open-ended questions are difficult to interpret, to aggregate data and to make systematic comparisons;
- It is a time consuming approach and typically mean that fewer people are studied than there would be if individual surveys / questionnaires were distributed to schools;
- Data analysis and constructing the narrative story is time consuming, based on a systematic coding process for discovering and describing key themes, dimensions and salient categories of ideas.

In consideration of these advantages and disadvantages, we believed that undertaking focus groups in a selected number of schools would serve as an appropriate approach to engaging with school faculty and capturing the richness and diversity of their stories.

3. Selection of potential schools

Three key selection processes were used to meet the objective of hearing the voices of teachers who were part of collaborative teams, and school administrators and curriculum leaders in these schools. Firstly, Phase 1 of the study documented the status of school libraries from the perspective of the school librarian. We wanted to capture perspectives other than school librarians, and particularly those in administration, as well as classroom teachers who had taken part in instructional collaborations in order to provide a more comprehensive picture of these school libraries.

Secondly, to access administrators and teachers, we believed that it was important to select those schools that reported high levels of instructional collaborations. The instructional collaborations would provide us with access to a pool of teachers who have worked closely with school librarians. Accordingly, the data base constructed through the Phase 1 survey was analyzed to provide a ranked listing of schools showing high numbers of instructional collaborations, with accompanying descriptive data: school type (public / private) grade levels of school, enrolment, location, curriculum areas in which instructional collaborations took place, data on the focus of the school's information literacy instruction, information technology instruction, and statements made by the participating school librarian in relation to the impacts of the instructional collaborations on student learning. Based on this approach, we selected 30 schools from all counties of New Jersey and across all school levels. The CISSL team and NJASL Advisory group met to consider the initial selection. This was an in-depth analysis and detailed consideration of each school in a frank and constructive way.

Thirdly, we felt that it was important to hear the insights of school administrators leading the schools. While they were not directly involved in the instructional collaborations, they provide insights into the context and culture of a school, as well as insights into learning philosophy, instructional approaches and support structures for school libraries, and we believed that this would enable us to elaborate and interpret the data.

Based on these decisions, our approach to establishing a focus group in the schools was to explicitly ask the schools to establish a focus group that comprised of the school principal, several classroom teachers from different curriculum content areas who were involved in instructional collaborations with the school librarian, curriculum supervisors / curriculum head, and any specialist teachers such as reading / literacy teachers, special needs teachers and the like.

From this list, 18 schools were selected, and these were approached for permission to conduct a focus group in the school. Twelve schools agreed to participate.

4. Focus Group Protocols

The CISSL team engaged in considerable discussion of the protocols of the focus groups: the central questions, and procedures. The following approach was agreed upon.

Goal: to produce a rich body of data expressed in respondent's own words and context through a semi-structured discussion. The semi-structured discussion sought to address three themes to meet the goals of the research:

1. *Theme 1: In what ways, if any, does the school library contribute to school learning?*
   The focus of this discussion is on identifying dimensions of library infrastructure, personnel, services and instruction and their relationship to student learning outcomes.

2. *Theme 2: What do students actually learn through their interaction and engagement with the school library?* The focus of this discussion is on student learning outcomes, specifically targeting learning outcomes, and evidence of these.
3. *Theme 3: What is it about this school that has enabled the school library to reach this status? If you could change things, what would they be?* The focus of this discussion is on identifying and explaining dimensions of school culture that have enabled the school library to be regarded as an effective school library, as well as to establish inhibitors / dimensions that can be improved.

In order to ensure the collection of rich data, the following set of prompt questions were developed for use by the focus group moderators as needed:

- What is the first thing that springs to mind?
- Would you explain further?
- Give an example from your own experience?
- Explain how this happens
- Who can build on this last idea?
- Building on this idea, what are some other alternatives?
- Let me hear some other perspectives on this
- How does this take place / happen in the school?
- Who does this?
- How does this help?
- Why do you think this is important?
- How important is this?
- How do you see this in the work of students? examples, assignments/research projects; particular competencies, attitudes, values; how does this show up in their knowledge of the curriculum tropics
- What gets in the way of this?
- Problems / difficulties you have encountered?
- describe experience where you encountered difficulty
- How important is this concern? problem?
- How does this impact / inhibit the work of the school library?
- How might this problem / barrier be solved?
- If you could change things, what would you do?
- If some people are silent: Let's see, I haven't heard from ***
- What am I missing?
- Before we move on, let's hear any more burning thoughts that you have to get out
- If you had a wish list to continue to enhance your school library for meeting NJ core content standards, what would be on it? Why?
- Summarizing, e.g., From all that you have heard, List the 3 most important things that the school library does for students; why do you think these are the most important?

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In each of these themes, specific aspects like: reading, literacy, standardized test scores, information technology, resources, instruction, collaboration, curriculum standards, culture in the school, support by principal, school board, philosophy of learning etc. may come up. Moderators will look for these, and further probe: How does this contribute? What is its connection to learning? What are the results in terms of student learning outcomes? What is the evidence for this?

It was established that there would be one focus group per school, with from 6 to 8 participants. This number of participants is the recommended number as established in the qualitative research literature. We explicitly stated that the focus groups in each school be composed of:

- School librarian;
- School principal;
- Curriculum head;
- Three collaborating teachers from different disciplines;
- Specialist faculty, e.g., reading / literacy coaches, ESL, Special Education.

The following procedures were established and consistent across all schools:

Focus Group Moderator (Leader of the discussion)
- Welcome;
- Overview of topic / themes;
- Ground Rules covering Confidentiality, How research will be used, Who will hear the tapes, Importance of one person at a time speaking, Different points of view, duration of focus group session;
- Introduction of themes and initial questions;
- Probing questions: moving form general to specific using the prompts specified above.

Focus Group Assistant Moderator
- Plays supportive role; does not participate in discussion;
- Responsible for equipment;
- Responsible for room arrangement;
- Sets up, operates, and checks recording equipment;
- Takes notes / memos throughout the discussion (Notable quotes, follow-up questions, big ideas, participant verbal and non-verbal cues);
- Manages time.

Selection and training of the CISSL team involved in focus groups took place at the School of Communication & Information on the Rutgers campus in October 2010. It was advertised to SCI doctoral students, particularly those who had undertaken Qualitative research Methods, one of the core required courses of their doctoral studies. Dr. Marie Radford, from SC&I, who has an extensive record of qualitative research using focus group methodology, was the instructor. The training covered the following topics:

- Phase 1: Planning;
- Phase 2: Conducting Focus Groups;
- Phase 3: Analysis of Focus Group Data;
- Phase 4: Reporting Results;
- Using Focus Group Results.

All CISSL personnel and six doctoral students participated in this training, which also involved a range of practical activities to manage the process, and to troubleshoot in the event of unforeseen events that could arise.

School visits took place from late November through to close of schools in December.

5. Data analysis

At the completion of each focus groups in each school, the recorded interviews (two copies from two digital recording devices) were posted to the CISSL Sakai site for managing the process. Doctoral students who worked as Moderators or Assistant moderators were responsible for transcribing the focus group discussions and structuring them to enable each participant's input to be identified and separated. Doctoral students also transcribed the focus groups that were moderated by CISSL researchers. This is a time consuming and painstaking process that requires checking and rechecking between the two recordings to ensure accuracy of the discussion.

One the interviews were transcribed and checked by the CISSL team, the transcripts were then consolidated into one single document for ease of analysis.

The researchers engaged in a standardized protocol of coding of qualitative data, employing three types of coding

- Open coding: process through which concepts are identified and their properties (characteristics) and dimensions (variation of properties of a category) are discovered in the data;
- Axial coding: process of relating categories to their subcategories, termed Axial because coding occurs around the axis of a category, linking categories at the level of properties and dimensions.

Selective coding: process of choosing one category to be core category – belief that such a core exists: school library as pedagogical center emerged as the predominant central construct.

6. Description of participating schools

Clearview Regional Middle School

Clearview Regional Middle School, which had an enrollment of 888 students in 2009-2010, is located in Gloucester County in the south west of the state. The median income in the area is approximately $60,000. Although the school did not make Adequate Yearly Progress it is not classified as "In Need of Improvement." In fact, 86.7% of Clearview students tested as at least proficient on the language arts literacy NJASK7 exam and 75% were at least proficient on the mathematics NJASK7 exam in 2009-2010 school year. Eighth grade students also performed well on NJASK with 92% at least proficient on the language arts test and 76.1% in mathematics. 93% of Clearview eighth graders received a score of at least proficient on the NJASK8 science test.

The focus group consisted of one member of school administration, one district administrator, one school librarian, and four teachers.

Grover Cleveland Middle School

Although Grover Cleveland Middle School did not make adequate yearly progress and is classified as "In Need of Improvement," more than three quarters of the 6th graders performed at least proficient or better on the NASK6 Language Arts Literacy exam (76.1%) and Mathematics exams (77.5%).   80.8% of 7th graders received at least proficient scores on the NJASK7 Language Arts Literacy and 69.2% of them received such scores on the NJASK7 Mathematics. 8th graders also performed well with 95.2%, 83.6%, and 94.3% receiving at least proficient scores on the language arts literacy, mathematics, and science tests respectively. Grover Cleveland Middle is located in Essex County and the median income in the area is $114,538. The total enrollment for 2009-2010 was 631 students.

The focus group consisted of five teachers, one school librarian, and the principal.

Hunterdon Central High School

Hunterdon Central High, located in Hunterdon County in the central west region of the state, had an enrollment of 2,999 students during the 2009-2010 school year. The median income of the area is $64,543. Although classified as "In Need of Improvement," only 5.7% of students received partial proficiency scores on the language arts literacy exam and 10.3% received such a score on the mathematics exam.

The focus group consisted of four teachers, three school librarians, the principal, and the district curriculum director.

Joseph Sharp Elementary School

Joseph Sharp Elementary has 340 students in grades 1through 5. Located in Camden County, the median family income for the area is $80,931. The school made Adequate Yearly Progress. In language arts literacy, 85.3% of students received at least proficient scores and 93.3% received such scores in mathematics. On the NJASK3, 85.2% of 3rd graders received at least proficient scores in language arts literacy and 95.1% scored at least proficient in mathematics with 68.9% receiving advanced scores. 61.8% of 4th graders obtained at least proficient scores on NJASK4 language arts literacy and 78% scored at least proficient on the mathematics portion of the exam. In science, 95.6% of 4th graders performed at least proficient levels. 5th graders also performed well on NJASK with only 12.7% in language arts and 9.5% in mathematics receiving partially proficient scores.

The focus group consisted of four teachers, a reading coach, the librarian, and the school principal.

Kawameeh Middle School

Kawameeh Middle School in Union County is located in an area with a median family income of $41,988. It had an enrollment of 698 in 2009-2010. The school is classified as "In Need of Improvement." 60.4%, 61.5%, and 74.3% of 6th, 7th, and 8th graders scored at least proficient on their respective NJASK language arts literacy tests. On the mathematics portion of the test, 35.7%, 55.1%, and 46.8% of the students respectively received partially proficient scores. 80.2% of 8th graders received scores of at least proficient on the science section of the NJASK8.

The focus group consisted of two teachers, one school librarian, one district administrator, and a recently retired teacher from the school who engaged in a number of collaborations until retirement.

Kearny High School

Located in Hudson County, Kearny High School had a total enrollment of 1,774 students in grades 9 through 12 and has a majority Hispanic population. The median income of the area is $68,557. 89.7% of the students performed at least proficiently on the language arts literacy test and 82.2% received such a score on the mathematics section. The school is classified as "In Need of Improvement."

The focus group consisted of five teachers, two school librarians, the supervisor of English, and the director of technology.

Metuchen High School

Classified as a school that made adequate yearly progress, Metuchen High School is located in Middlesex County in central New Jersey. The median income for the area is $122,722 and there

were 608.5 students enrolled at the school I 2009-2010. Only 4.3% of the students received partial proficiency scores on the language arts literacy exam and 10.1% received such a score on the mathematics test.

The focus group consisted of five teachers, one school librarian, a district administrator, and the principal.

Middlesex County Vocational School at Perth Amboy

The Middlesex County Vocation School at Perth Amboy enrolled 305 students in 2009-2010. The median income for the surrounding area is $42,860. The school made adequate progress. 87.3% of the students received at least proficient scores on the language arts literacy test and 49.1% received such a score on the mathematics portion of the test.

The focus group consisted of two teachers, one instructor, the school librarian, the principal, and a district administrator.

Morristown High School

Located in an area of Morris County with a median income of $149,175, Morristown High School is classified as making adequate yearly progress and also as in need of improvement. There are 1,494 students enrolled in Morristown High. Most students (90.7%) scored at least proficient on the language arts literacy exam and almost as many (87.2%) scored similarly on the mathematics section.

The focus group consisted of three teachers, one instructional leader, one supervisor of instruction, one full-time school librarian, one part-time school librarian who also has an appointment as an ELL teacher, and the principal.

Newton High School

At Newton High School, 93.4% of students received scores of at least proficient on the language arts literacy exam and 88.8% received such scores on the mathematics section of the exam. The school is classified as making adequate yearly progress. It is located in Sussex County in an area with a median income of $75,561. There were 813 students enrolled in 2009-2010.

The focus group consisted of four teachers, a director from district administration, the school librarian, and the principal.

North Hunterdon Regional High School

North Hunterdon Regional High School is located in Hunterdon County and had an enrollment of 1,783.5 students. The area has a median income of $116,111 and the school is classified as making adequate yearly progress. Students performed extremely well on the school proficiency

assessment tests with only 2.1% receiving partial proficiency scores in language arts literacy and 6.9% receiving partial proficiency scores in mathematics.

The focus group consisted of four teachers, the department supervisors of English and social students, two school librarians, and the principal.

Seneca High School

There were 1,340 students enrolled in Seneca High School, located in Burlington County, in 2009-2010. The area has a median income of $100,740 and the school is classified as making adequate yearly progress. In language arts literacy, 97.6% of students scored at least proficient and 85.1% received similar scores on the mathematics section.

The focus group consisted of four teachers (including two who are co-coordinators), two school librarians, and the assistant principal.

South Plainfield Middle School

South Plainfield Middle School is located in Middlesex County in an area with a median income of $96,537. There were 581 students enrolled in the school in 2009-2010 in grades 7 and 8. 76% of 7th graders tested at least proficient on the language arts literacy section of the NJASK7. 68.8% scored similarly on the mathematics section. On NJASK8, 91.8% of 8th grade students received at least proficient scores on the language arts literacy portion and 68.7% tested similarly on the mathematics section. In science only 7.6% received partially proficient scores. The school did not make adequate yearly progress and is classified as in need of improvement.

The focus group consisted of three teachers, two school librarians, and the assistant principal..

Washington Township High School

Located in Gloucester County, Washington Township High School enrolled 2,773.5 students in 2009-2010. The area has a median income of $90,567 and the school made adequate yearly progress. Only 2.6% of students received partially proficient scores on the language arts literacy exam and 8.8% scored similarly on the mathematics section.

The focus group consisted of four teachers, two people with joint appointments as teachers and school librarians, one full time school librarian, and the principal.

7. Demographics of focus group participants

The distribution of participants in the focus groups is shown in Table 1:

Table 1: Distribution of Focus Group Participants

Focus Group Participants

Role	Count
Teacher	48
Librarian	18
Department Supervisor	10
Principal	10
District Director	4
Librarian and Teacher	3
Other	3
Assistant Principal	1
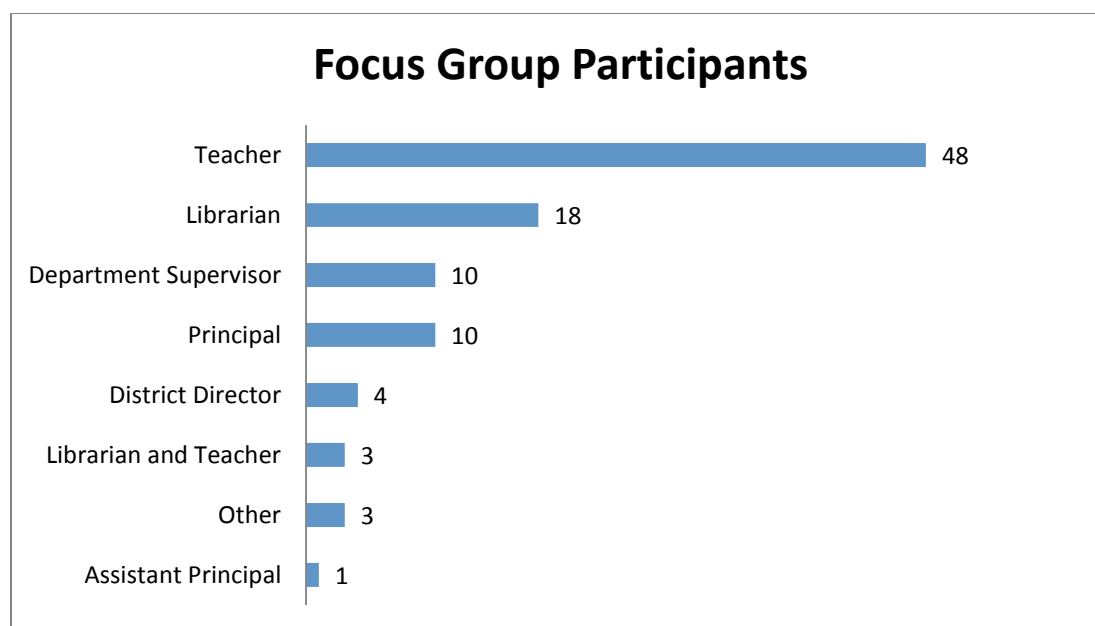
Almost half of the participants (49%) were classroom teachers; 22% of participants had school librarian positions (either full time or part time), and 29% had school or district administrative positions.

Table 2 shows the distribution of focus group participants according to gender.

Table 2: Distribution of participants by gender

Role	Males		Females		Total
Teacher	14		34		48
School Librarian	2		16		18
Department Supervisor	5		5		10
Principal	8		2		10
District Director	3		1		4
Librarian and Teacher	0		3		3
Other	1		2		3
Assistant Principal	1		0		1
Total	34	35%	63	65%	97

65% of the focus group participants were female, and 35% were male. Teachers and school librarians were predominantly females, administrative personnel were predominantly male.

Table 3 shows the frequency of curriculum areas represented by participants.

Table 3: Distribution of Curriculum areas

Curriculum Area	Frequency
3rd Grade	1
3rd Grade	1
4th Grade	1
5th Grade	1
7th Grade Life Science	1
Administration	10
Culinary Arts	1
District Administration	6
English	15
ESL	1
Foreign Languages	1
History	2
Language Arts	1
Language Arts, History	1
Learning Disabilities	1
Library	18
Library, English	3
Literacy	1
Other	2
Physical Education	1
Physics	1
School Administration	2
Science	5
Science/Math	1
Social Studies	10
Social Studies, English	1
Spanish	2
Special Education	6

Executive Summary

Phase 2 NJASL Research Study: One Common Goal: Student Learning

The overall research agenda of Phases 1 and 2 of this study seeks:

> (a) To construct a picture of the status of New Jersey's school libraries in the educational landscape of New Jersey;
>
> (b) To understand the contribution of quality school libraries to education in New Jersey;
>
> (c) To understand the contextual and professional dynamics that inhibit and enable school libraries to contribute significantly to education in New Jersey, and
>
> (d) To make recommendations to NJ stakeholders to develop a sustained and long term program of capacity building and evidence-based continuous improvement of school libraries in New Jersey.

Phase 2 of the NJASL study, conducted from September 2010 to August 2011, examined 12 schools whose librarians reported high levels of collaboration with teachers in the survey administered in Phase 1 of the study. Focus groups in the schools were comprised of the school principal, the school librarian, and classroom teachers, including specialists such as special needs and literacy teachers. The focus groups addressed the following themes:

- *Theme 1:*   In what ways does the school support learning through the school library? (pp 36-63)
- *Theme 2:*   In what ways, if any, does the school library contribute to learning? (pp 57-154)
- *Theme 3:*   What do students learn through their interaction and engagement with the school library? (pp 75-154)
- *Theme 4:*   How do you envision the future of school libraries? (pp 154-172)

> The narratives that address these questions collectively portray the school library and the work of school librarians as essential to learning in information and technology intense environments.

Theme 1: In what ways does the school support learning through the school library? (pp 36-63)

Educational beliefs and school culture (pp 36-49)
A strong set of educational beliefs and a collaborative school culture were common to these schools, enabling the school library as learning and pedagogical center, and the school librarian as an information learning specialist for faculty and students. In the broad educational context of schooling, these educators share the following beliefs:

- Learning in an increasingly globalized, information-rich and technological world is complex and it takes a whole school, with a committed vision, sound pedagogy, and strong information and technology infrastructure, working together to provide relevant educational opportunities and learning experiences for students;
- A whole school approach values learning and working collaboratively as an essential competency for quality teachers and quality teaching;
- Effective teachers and quality teaching are the most important factor for creating an effective learning environment;
- A dynamic technological and media-infused environment demands complex information capabilities and expert use of media and technology to build content knowledge and transfer capabilities to other contexts and opportunities;
- Engagement of students in an information environment, emphasizes competencies that enable critical thinking and problem solving, communication and collaboration, and creativity and innovation;
- High intellectual quality of students' learning outcomes derives from students effective engagement with diverse information resources underpinned by an authentic, powerful, and collaborative pedagogy;
- Preparation of students to be digital citizens traverses the technological geography and the cultural and social norms of virtual environments, taking a 21st century perspective on knowledge and values that enable integrity, leadership, self-confidence, self-direction, adaptability , and productivity;
- The provision and maintenance of a supportive information environment, staffed by a certified school librarian establishes a culture of high expectations that are essential to high quality learning outcomes.

The participants in this study are educators who conceptualize school libraries as 21st century classrooms that provide the information- and technology-rich learning environments that young people confront in the world in which they live.

School Culture and the School Library Concept (pp 49-63)

The participants provide a dynamic picture of the nature of a school culture that supports the school library as learning center linked to the learning going on in the school and the learning success of the school. These include:
- A powerful and pervasive belief that school libraries are "part of the way we do things here;"
- The vision and leadership of school principals who see the unique learning opportunities provided though the school library, despite the cost;
- School principals who have the courage to make a financial commitment to the school library;
- School librarians who understand that principal support and investment in school libraries is critical;
- School librarians who value a principal who understands what an effective school librarian looks like and who provides other forms of support in addition to adequate funding;

- Principals who are able to nurture a school culture that supports the most effective operation of the school library. Teachers are cognizant of whether the principal is committed to the school library and the ways in which s/he supports it;
- Teachers who are aware of the framework of school culture that accommodates the logistics that need to be in place for a school library to work;
- Faculty who support of the school library as a function of a culture of community, as well a function of their educational goals for their students;
- Teachers who are encouraged and supported to value the school library as a place where they can collaborate and innovate, explore new technologies, learn new pedagogical approaches;
- A whole school that sees that the school library is not an isolated, independent unit in the school but a collaborative opportunity;
- Teachers who view collaboration as supportive of their teaching.

Part of the cultural dynamics of these participating schools is the high expectation that school librarians are primarily co-teachers who undertake an active role in engaging in shared instruction in diverse ways. Principals who support school libraries have established an open culture for the exchange of ideas among faculty. They think outside the box, take reasonable risks, try new things, and allow the educational 'experts' to do their jobs. They are delegators who trust their teachers. School librarians view trust of principals and teachers and students as confidence in their professional decisions and leadership of the school library, giving them autonomy to do their professional jobs and meet broader professional role expectations. They know that teachers develop trust from a respect for their instructional expertise and experience, and their capability as co-teachers working toward common curriculum standards. For principals, teachers and school librarians it is about collaboration, culture, and community. Without these supporting educational beliefs and a collaborative culture, it is difficult for the school library to be perceived as a learning center. The predominant activity observed in the school library was not information-centered, including the flow, management and organization of information; it was the learning in which students were engaged.

Theme 2: In what ways, if any, does the school library contribute to school learning? (pp 63-154)

Based on the evidence from the twelve focus groups who participated in this study, we make the following claims about how school libraries shape the learning environment:

- The school library environment aims to provide equitable and stable information access to all;
- The school library establishes a learning environment where students are guided by professionals to effectively utilize information and technology tools in ethical and safe ways;
- The school library is a communal information center that supports investigation and experimentation with information and technology to foster quality teaching that empowers learning across the school;

- For faculty, the school library, as a center of learning innovation, conducts substantial, cost-effective, hands-on professional development to faculty and staff through the cooperative design of learning experiences that integrate information and technology;
- The school library contributes quality teaching in schools through the provision of inquiry-based instruction implemented through instructional teams;
- The school library is an extension of the classroom that offers a central, safe place that removes barriers and constraints to learning with information resources and information technology;
- The school library offers services that are different from those provided in the classroom: It connects information and expertise at the intersection of digital and print information in and beyond the walls of the school;
- The school library is not only a place for information exchange and reading enrichment: It is the center for digital literacy;
- For students, the primary focus of the school library is on *building capacity for critical engagement* with information, with an emphasis the critical evaluation of sources, on the critical interrogation of diverse sources of information, and on asking, thinking and creating.

The participants identified the following common characteristics of school libraries as learning centers:

- The school library is a multi-disciplinary learning space where all subjects are represented and supported;
- The school library's mosaic of knowledge and global access creates an environment where learning is respected and pursued, guided and nurtured in safe and critical ways;
- Learning in the school library is viewed as process that is discovered as students pursue personal information needs as well as curriculum-related learning. The school library is defined and distinguished as a place that helps them to learn how to learn;
- The school library is seen as a source of energy that supports the school's mission to produce literate and informed learners who can thrive in a digital, knowledge based world;
- As the hub of a learning network, the school library supports a community of learners and the exchange of ideas across the school and its global environment;
- The school library's centrality in the learning agenda of the school is attributed to the work of the school librarians;
- The role of the school librarian is central to learning because s/he is viewed as a teacher, and whose primary work centers on being an instructional partner with information-learning expertise;
- The unique contribution of the school librarian as teacher is the vision of learning through engagement with information and resources, and whose instructional role in the school makes it happen;
- The learning-centered work of the school librarian that enacts the vision plays a significant part in defining the school library as a learning center. It is the actions of the school librarians and teachers in the school that realize the vision, with the support of a principal who "lets the experts do their jobs";

- Teachers recognize the instructional expertise of school librarians and actively seek out this expertise, and consistently highlighted the sustained, active use of the school library by them and their students;
- Principals in the study identify the actions of school librarians as shaping, as well as supporting school culture of deep learning and preparation as citizen living and learning in a digital global world;
- Teaching and learning is seen as a major part of a school's culture, and principals acknowledged that their school librarians had an impact on teaching and learning;
- The school library offers a learning environment that is not based on "the right answer" prompted by rote learning, but on a more complex model of teaching and learning that is exploratory and highly motivational;
- Students want to be in the library. They view it as their information home and value the expert guidance they receive;
- Students like the informality of the school library environment where they can walk around, sit where they want, and talk to each other;
- The school library sets the stage for student-initiated inquiry;
- The school library allows learning to happen serendipitously;
- The school library is also an inviting place of learning for teachers;
- School librarians build virtual as well as physical environments for learning;
- The school library supports hybrid activities that connect real and virtual worlds of the school community.

How the School Library is Different from the Classroom (pp 57-63)
The school library has long been viewed by educators as different from the classroom in the following ways:

- Differing content of learning, teaching methods, learning behaviors and learning outcomes;
- Diverse traditional and online collections;
- Access to information sources and technology, offering more choice of reading materials;
- A source of expensive technology;
- Students learning information and inquiry skills that are seen as life skills enabling them to function interdependently and independently in the digital world;
- Students learning information management skills;
- The school library as a home base for team planning for teachers;
- The school library as providing more constructivist, hands on learning;
- A more relaxed atmosphere as students learn in diverse ways;
- The information-learning expertise that the school librarian provides;
- The school library as an extension of the classroom, supporting enrichment activities and special needs learning.

The School Library as Pedagogical Center (pp 63-75)
The school library as a pedagogical center emerges as the strongest statement of the instructional role of the school librarian, and the school library as a connector that enables:

- Students to connect curriculum learning and their personal interests;

- Teachers to connect disciplines to provide a richer interdisciplinary approach to learning;
- Teachers to connect to each other to provide the best learning experiences for students
- Students and teachers to connect to the wider world of information;

The connections are perceived to be "easy" because of the systems, processes and organization in place in the school library, and because of a philosophy and practice of "help" provided by the school librarians. The school library as connector was portrayed in many different ways:

- The school library connects with the values of a school district and with its school community;
- The school library connects the school and home through technology, and through the relationships the school librarian establishes;
- The school librarian is an information broker who connects people with resources;
- School librarians bring information and people together at the point of need;
- The school library is a digital library that has no walls;
- The school library is multi-disciplinary: It is where the disciplines meet in a real world setting;
- The school library, through information, breathes life into the curriculum and connects curriculum to the real world of students;
- The school library connects people to each other as they learn together;
- The school librarian connects the school library with the public library.

The school librarian's role as connector firmly establishes the school as connected to the community, the curriculum connected to the real world, and the school community connected to its stakeholders. In the role of teacher the school librarian makes the ultimate connection among the academic disciplines represented in the school curriculum and the instructional program.

School Librarians as Co-Teachers (pp 67-72)

From the perspective of the participants in this study, the school library functions primarily as a pedagogical center for students and faculty. It is a common instructional zone for the whole school where students learn to learn through information led by professional school librarians. Focus groups portrayed the school librarian primarily as teacher who has the unique role of seeing the 'big picture" and pulling the academic disciplines together. As co-teachers:

- School librarians bring depth to learning by helping students and teachers develop information skills that lead to the retrieval and utilization of good information.;
- School librarians facilitate the integration of skill and content instruction;
- School librarians cannot do this alone; Collegiality grows from mutual intents and shared experiences as teachers;
- Teachers open their classrooms in order to collaborate because they recognize the value they derive from collaborating with the school librarian;
- Teachers see themselves as modeling collaboration for students;
- Teachers respect the school librarian as an educator with whom they can identify and on whom they can rely.

Principals are willing to support the acquisition of resources for the school library with an adequate budget because they perceive the school librarian as a good teacher who actively engages in curriculum planning. In some of the focus groups teachers expressed deep emotion about how school librarians helped them to be better teachers. Principals recognize the need to provide professional development for school librarians that enables them to be good teachers and good teachers of teachers.

School Librarian as Teacher of Teachers (pp 140-146)
Participants identified the information-learning expertise of the school librarians, and the co-teaching role of the school librarian as not limited to students. Rather it extended to considerable in-school training of teachers. The school librarians were positioned and seen to deliver effective professional development with ongoing support. Because the professional development offered by the school librarian is hands-on, teachers feel that they are learning something useful, and are more likely to use it in the context in which they learned it. The school librarian plays a dynamic role in building collaborative and collegial relationships among staff members through sharing of information-learning expertise, ideas, problems and solutions as everyone works together to build a better school. The wider school culture of investing in school libraries, amd giving the school librarians freedom to implement professional expertise gives rise to a pervasive notion of school libraries as part of a "culture of help" in schools. School librarians take an active role in nurturing this help, which creates further ripples of help.

Qualities of Effective School Librarians (pp 146-154)
The educators, particularly principals, participating in this study often refer to the qualities of the school librarian as the major factor in the success of the school library program. The school library reflects the dispositions and personality traits of the librarian. Principals in particular recognize the importance of library staff in the effectiveness of the library program.

The qualities of effective school librarian continually emerged from focus group discussions:
- Being resilient;
- Being non-judgmental with students and teachers;
- Building an atmosphere of open communication;
- Being willing to go the extra mile to be supportive of teaching and learning;
- Actively building a profile of the school library as an active learning center;
- Having high visibility as teachers and works to sustain this as a priority;
- Being sociable and accessible, inclusive and welcoming;
- Being the living antithesis of the librarian stereotype;
- Loving to learn and being a lifelong learner who wants to share knowledge and expertise;
- Having a strong "help" orientation, i.e. this is about learning, not the library!
- Focusing not so much on their libraries, but on their commitment to enabling multiple learning needs to be met;
- Being solution-oriented;
- Creating the ethos of the library that is an invitation to learning., a place to be, do and become;
- Having high expectations for colleagues and for students;

- Liking and caring about young people and having flexibility in creating a learning environment that appeals to them;
- Being leaders and instructional innovators who are not afraid to take risks, be creative, and do what best serves learners of all ages

Theme 3: What do students learn through their interaction and engagement with the school library? (pp 75-154)

Figure 1, below, shows the conceptualization of the school library becomes as a framework for teaching and learning.
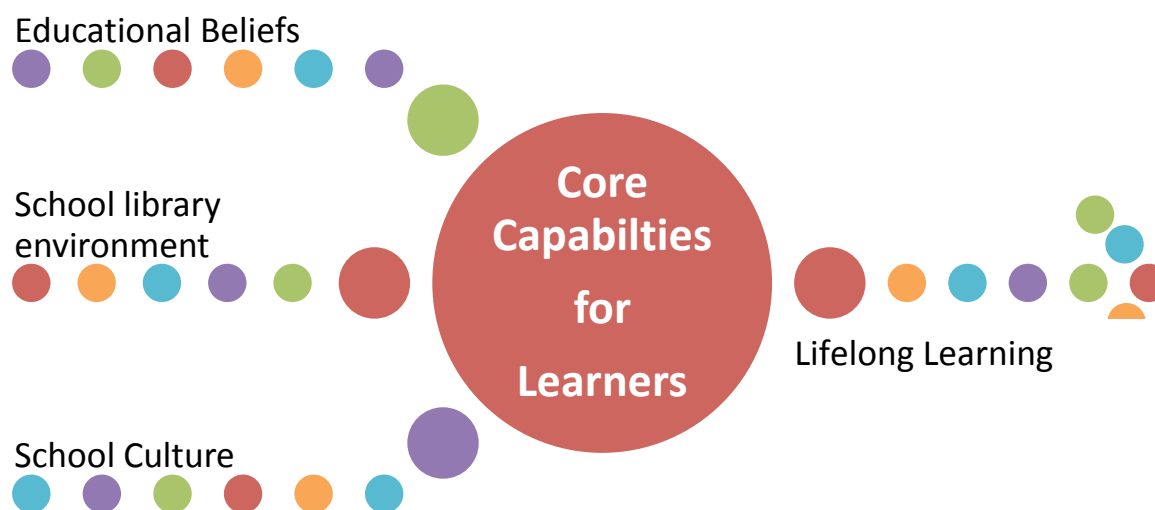

Figure 1: Framework for Teaching and Learning (p 75)

To this end, the core capabilities developed by school libraries for students that emerge from the focus group conversations include:

a. **Resource-based capabilities**: Seeking, accessing and evaluating information sources in a variety of formats, including print-based and digital literacies, social and cultural artifacts, and technological tools.
b. **Knowledge-based capabilities**: Creation, construction and sharing of the products of knowledge that demonstrate deep knowledge and understanding.
c. **Reading-to-learn capabilities**: Comprehension, interpretation, communication, and dissemination of text in multiple formats to enable the development of meaning and understanding.
d. **Thinking-based capabilities**: Substantive engagement with information through higher order thinking, and critical analysis that generate original ideas.
e. **Learning management capabilities**: Preparation, planning and successfully undertaking a curriculum-based inquiry unit.

f. *Personal and interpersonal capabilities*: Learning how to learn as independent learner and collaborative learners.

The Nature of Inquiry Teaching in the School Library (pp 75-104)

The school library contributes directly to quality teaching in schools through the provision of a unique kind of inquiry-based instruction that is based on research in the information and learning sciences and implemented through instructional teams. This inquiry-based instruction gives emphasis to intellectual agency for developing deep knowledge and understanding, rather than that of information collection and skills of finding information. One of the key attributes of inquiry is building excitement, interest and motivation for learning, and engaging students in the active process of discovery and knowledge development. Teachers acknowledged that working with library resources provides rich information and a variety of perspectives not available from the textbook. They recognize the multi-modal nature of literacies that have emerged from the digital environment and the importance of addressing these literacies. They saw that inquiry-based learning engages students as content providers who work on- and off-line to produce creative products, or learning outcomes that represent what they have learned. Students' capacity to undertake quality research through engaging with information was recognized as an important aspect of learning in all curriculum areas. The instructional role of the school librarian was explicitly linked to improvement in students' research capabilities. Teachers understand that acquiring information and research skills is a slow and gradual process, but allows students to find their own style of research within a structured framework provided for them. The staged process of inquiry-based learning is valued by classroom teachers. Students are not left to their own devices to undertake substantial research projects. *Rather, the inquiry-centered instruction provided jointly by collaborating teams was carefully planned and staged to take students though a research journey, carefully diagnosing particular learning needs to ensure successful research.* Part of the inquiry-centered approach to learning through the school library is modeling the inquiry process with teachers. Teachers are trained in the process of doing research by the school librarians, and as a result, have honed their capacity of inquiry:

In this study, a key criterion for selecting the schools was the high levels of instructional collaborations reported in these schools, and documented in Phase 1 of this study. Collaboration emerged as the central dynamic of enabling the school library and the work of the school librarian to be integrated so widely and so deeply into the learning fabric of the school. Teachers talked freely about collaboration with the school librarian. There was consensus that collaboration is the key ingredient in the success of school libraries in these schools. It was the instructional norm. And the norm was teams. They recognized the contribution of the school librarian's expertise in research and digital technology as critical to the collaboration. Underpinning the notion of "team work" and "team players" is the mutuality of working towards one common goal – enabling core curriculum content standards. The school library was portrayed as a common ground across the school for meeting individual and special needs. This was particularly identified by teachers of at-risk students and literacy teachers who saw the school librarians as providing targeted information, targeted instruction, and guidance to meet unique learning needs.

Data from Phase 1 clearly indicate that information literacy instruction is extensively undertaken by school librarians in New Jersey schools. In this study, there was little reference to "information literacy" or "information skills". This is not to say that these were not developed:

Participants tended to focus more on specific skills that needed to be taught, rather than speaking more generically about "information literacy". These include basic information finding skills, thinking skills, and the multimodal literacies that ensure comprehension of what is read, in print or digital formats, and what is viewed and/or heard. Known as transliteracies, they include literacies include visual literacy, print literacy, media literacy, digital literacy, and technological literacies.

Of all of the resources available through the school library, the participants focused strongly on access to and use of databases and the quality information that they provide. Database use appeared to be strongly integrated into processes of developing research skills, learning to access quality scholarly information, and their use was often set up as a resource expectation by the classroom teachers. Some school libraries provide access to databases outside of the school, and this is viewed as a valuable resource:

Digital citizenship (pp104-113)

In relation to life skills, the strongest set of capabilities identified by the participants centered on developing capabilities around digital citizenship. The instructional role of the school librarian is a significant mechanism for the development of students as digital citizens. Participants highlighted a number of dimensions which they saw as central to the work of their school libraries:

1. Recognizing quality information in multiple modes and across multiple platforms.
2. Accessing quality information across diverse formats and platforms.
3. Participating in digital communication in collaborative and ethical ways to share ideas, work together and to produce knowledge.
4. Using sophisticated information technology tools to search, access, create and demonstrate knowledge in new ways.
5. Learning appropriate ethical approaches and behaviors in relation to use of digital technologies.
6. Understanding the dangers inherent in the use of complex information technologies and learning strategies to protect identity, personal information, and safety.
7. Acquiring technical and behavioral approaches to develop digital etiquette and security.

The participants acknowledge that students are already actively engaged in a technology-led participatory culture, including Facebook, message boards, gaming communities, and other online communities. They are using technology tools to produce new genres, mash-ups, and outcomes. Some are blogging and communicating across geographical and cultural boundaries. It is important that they learn the dispositions, skills, and capabilities for working collaboratively in ethical and safe ways.

Digital citizenship includes the important dimension of information ethics. The participants expressed deep concern for students as safe and ethical users of information and saw that the school library as the central dynamic for enabling this. The library was seen as a microcosm of the complex information landscape and a place where appropriate ethical behaviors could be taught, modeled and developed, and then reinforced by teachers in the classroom. School libraries give strong attention to students developing ethical approaches to information use, as

evidenced in instruction centering on the appropriation of information, acknowledging and citing the ideas of others, and understanding the ethics of information ownership.

Literacy support (pp 113-121)

Participants identified the school library as a major contributor to developing and supporting literacy in the traditional sense: Reading motivation; reading engagement; reading fluency; reading comprehension; sustained reading; strategic reading; reading for pleasure; and reading remediation. Access to diverse, quality reading materials is viewed as essential for nurturing and sustaining students as active readers, and for supporting individual reading interests. Participants acknowledge that sustained reading that develops comprehension is promoted by the school librarian who guides student reading choices and encourages enjoyment of reading. The school library provides diverse media that promote transliteracies. Reading flows into career choices and the writing process, and teachers value school library support of conventions of citation and writing formal papers. Participants in the study identified a range of outcomes from the sustained focus of the school library on reading and literacy development such as student achievement, test scores, vocabulary development, and fostering interactions around reading. These outcomes are the result of supporting emerging literacy development for older elementary students and adolescents after they learn to decode and read. Without this support and deep and sustained reading, comprehension may not develop on its own.

Social and Affective Learning from Information through Inquiry in the School Library (pp 121-127)

School libraries contribute to the development of social and collaborative skills. The participants identified a range of social and affective behaviors and dispositions that are nurtured through the school library, including aspects of emotional development, and developing social, interpersonal and communication skills that are important for living and working outside of school. Key dimensions identified include:

- Developing communication skills that are part of doing and presenting research;
- Participating in cooperative team work in the school library which helps students how to learn to learn from each other;
- Helping students build self-esteem and self-efficacy;
- Developing students' good behavior and social skills;
- Promoting a sharing learning culture;
- Developing empathy in students for diverse viewpoints;
- Developing personal management skills as well as social skills in learning contexts;
- Developing online social processes and communication skills.

In the participating schools, learning is viewed as a social activity, and conversation is a critical shared activity to foster learning. School librarians have embraced the library as place for talking and developing relationships that support teaching and learning. The library is also a knowledge space. With emphasis of these school libraries on inquiry, thinking, reflecting and communicating, the school library is positioned as a knowledge space, rather than an information place.

The school library is a surrogate home (pp 127-131)

The school library provides access to resources, technology, and information and instructional

services that are not available in the homes of the school community. Many principals pointed out that communities surrounding their schools are not wealthy and the presence of a school library serves as an information environment for all. This also applied to having space available for students to engage with information and to give them the appropriate support for their learning.

The school library as a safe place (pp 127-131)

The notion of the school library as a safe place was identified in all of the focus groups. "Safe" was interpreted from a range of perspectives: A place where students can engage with information knowing that they can get individual guidance; a place where they can explore diverse topics, even controversial topics, in privacy and without interruption; a place where they know information they access is trustworthy; a place where they can retreat and work without interruption and intervention by other students without any kind of threat; a place where they can obtain individual mentoring as needed without any kind of judgment.

Assessment of Student Learning in the School Library (pp 131-140)

There is a considerable body of research which has sought to establish the school library's impact on student achievement as measured by standardized test scores. Surprisingly, this did not emerge as a strong theme in the focus groups. There was considerable discussion of the longer-term impacts of the school library in terms of learning outcomes. These center on the development of a range of capabilities and dispositions that can last a life time and have salience beyond schooling and not merely school-based achievement: Navigating the information landscape, career skills, digital citizenship, ethical behaviors, and lifelong learning capabilities.

According to the participants in this study, independent learning is seen as an approach to learning where learners invest time and effort into mastering a range of capabilities to become self-sufficient, able to apply a range of skills to act autonomously and with self-direction. In doing so, they exhibit responsibility for their own learning. In this study the participants perceived lifelong learning to be an extension of, and outcome of independent learning. It is perceived as the continuous building of capabilities, and application of these capabilities beyond school and throughout life. The students' learning experiences provided through the school library were viewed as "lasting" and encompassed a range of capabilities – motivation and passion for reading, engaging with information as experts, using information to solve problems, accessing a variety of information sources beyond the school library, and experiencing success as a key outcome.

Transfer of learning was viewed as the application of skills and knowledge that were learned in one situation to another situation – another learning situation at school, or outside of school, and recognizing the value of the instruction they have received as they move into other walks of learning, such as university, and the work life. The notion of transfer of learning was not limited to students. Teachers made explicit reference to their own learning through instructional collaborations and learning from each other and the school librarian. This shapes their own work as teachers, particularly empowering their teaching and improving the quality of their teaching.

Theme 4: How do Educators Envision their Future School Libraries (pp 154-172)

Are school libraries a thing of the past? Educators in this study saw the high expectations for and outcomes of school libraries in their schools as a rationale for more funding for school libraries. Despite the current budget crisis, these educators want larger libraries and increased staffing.

The Vision for More Library Space (pp 154-163)

Teachers wanted more space to develop instructional opportunities. Collaborative learning was viewed as a teaching method that requires more school library space enabling teachers to differentiate to meet diverse student needs. Recognizing the social nature of social and collaborative learning in the school library, some educators wanted a coffee shop in the library. Other considerations that drove teachers' wish lists was the perceived need for more technology to support specific content needs such as: Writing labs to facilitate the writing process; Language labs with immediate connections to resources; More computer space to enhance transliteracy experiences; Additional need for small, quiet spaces for reading; Teleconferencing facilities; An information technology place for teachers. The value of the library was clearly seen in its intersection with print and digital resources, and there was no indication that the print-based resources should be reduced. At the same time, it was acknowledged that digital information services were expanding, placing increased demand on technology and the need to continuously improve the technology infrastructure, accompanied by specialist technical expertise.

Increased Staffing (pp 163-164)

Educators saw the need for more staffing in the library centered on instructional opportunities centering on the creative engagement with information and information technology to meet content standards and to provide significant life learning experiences for students. Focus groups were interested in having more time for instructional collaborations, which requires more school librarians. They saw that this would continue to build even more widespread curriculum integration and strengthen the interdisciplinary learning and teaching taking place and get more teachers involved in the school library. From the perspective of the school librarians, this would enable them to interact more holistically in the information-to-knowledge journey of the students, from instructional planning to assessment.

The Threat of Budget Cuts (pp 169-172)

Participants saw the future of school libraries threatened by budget cuts in education. This surfaced in several focus groups. These concerns were about the political climate and education, and not just in the state of New Jersey, and the potential negative impact of reduced budgets on the work of the school library. Here are educators committed to making a difference in their students' learning and expressing concern that this is not valued by government.

Participating educators recognize information as the raw material of learning. Unmediated access to vast amounts of information through digital technology calls for a pedagogy of intervention and help. The school library is an innovation that introduced a mature concept of help as integral to the delivery of information services to an educational setting. More importantly, school libraries support standards-based teaching and school curricula, but they go beyond minimal performance that defines achievement of basic skills measured by standardized tests scores to scaffold learning to attain more complex critical thinking that results in student creativity and innovation. While schools need to meet basic requirements for student achievement, this is a

means to an end, and as such is no longer sufficient for preparing students for living and working in an Information Age that presents an increasingly complex information infrastructure. Through the services of school libraries schools can meet the challenge of producing a multi-literate population of young people who can be the traditions of scholarship and academic accomplishments that define our culture as a nation.

If school librarians don't do it, who will?

One Common Goal: Student Learning, Phase 2

The Findings: The Story

I. School Libraries and School Culture

A school that values its libraries, values education (Teacher)

This is the story of twelve public schools in New Jersey and their school libraries told by 97 educators, including principals, curriculum directors, subject area supervisors, classroom teachers, teachers with specializations, and school librarians. Their stories emerge from the 2008-2009 school year when tough economic times were on the horizon, threatening deep budget cuts in education. Along with cuts in staffing, resources, and even school libraries, was the threat to educational visions and beliefs about how children are best educated for career and college in the 21st century.

While there are demographic and socioeconomic differences among these schools and the communities they serve, there is strong consensus about the role of the school librarian in teaching and learning and the contributions that the school library makes to a school culture of collaboration that is committed to a high standard of education. This section of the report examines the educational beliefs and culture of schools that support the school library as a learning center.

A Framework of Educational Beliefs of School Library-Friendly Schools

If you're talking about developing a collaborative culture then you have to have a framework within the building that will develop and support that. I think we've moved in that direction. (Elementary Teacher)

In the broad educational context of schooling these educators share the following beliefs that indicate an expanded and elaborated view of what an effective learning environment looks like that includes, but is not exclusive to the classroom.

- Learning in an increasingly globalized, information-rich and technological world is complex and it takes a whole school, with a committed vision, sound pedagogy, and strong information and technology infrastructure, working together to provide relevant educational opportunities and learning experiences for students;

- A whole school approach values learning and working collaboratively as an essential competency for quality teachers and quality teaching;

- Quality teachers and quality teaching are the most important factors for creating an effective learning environment;

- A dynamic technological and media-infused environment demands complex information capabilities and expert use of media and technology to build content knowledge and transfer these capabilities to other learning contexts and life opportunities;

- Effective pedagogy engages students in an information environment, with an emphasis on the competencies that enable critical thinking and problem solving, communication and collaboration, and creativity and innovation;

- High intellectual quality of students' learning outcomes derives from students effective engagement with diverse information resources underpinned by an authentic, powerful, and collaborative pedagogy;

- Preparation of students as digital citizens includes the technological geography and cultural and social norms of virtual environments, taking a 21st century perspective on knowledge and values that enable integrity, leadership, self-confidence, self-direction, adaptability , and productivity;

- The provision and maintenance of a supportive information environment, staffed by a certified school librarian in a culture of high expectations are essential to high quality learning outcomes.

These beliefs are supported by private and public national initiatives that call for a 21st century education. The Partnership for 21st Century Skills (2004, http://www.21stcenturyskills.org), a consortium of

educators, corporate technology companies, stakeholders and policymakers, developed a framework for 21st century teaching not unlike the framework of beliefs that emerged from this study. They identified 21st century skills, i.e., learning and innovation, information, media and technology, and life and career skills, support for core academic subjects, such as science, language arts, mathematics, and social studies, as well as 21st century themes, such as globalization and the environment. A content and skills curriculum is firmly embedded in standards and assessments, curriculum and instruction, and professional development that shape the learning environment. The participating schools in this study recognize that school libraries have the potential to play a significant role in support systems that strengthen the teaching of academic content.

> *...in terms of contributing to the learning process, the library does it, but on two different levels: ... content support but also skills support. Sometimes those skills are ... more imperative than the content because they are lifelong skills that teachers are supporting through their content as well.* (Language Arts Supervisor)

The framework of beliefs also relates to the learning goals of the national information literacy standards, set by the American Association of School Librarians (2007), which are foundational to learning from information in a digital world. The standards go beyond the mechanics of basic information finding to complex dimensions of information utilization: Inquiring, thinking critically, gaining knowledge, drawing conclusions, making informed decisions, applying knowledge to new situations, creating new knowledge, sharing knowledge, using information ethically and productively, and pursuing personal and aesthetic growth. The P21 framework and AASL standards clearly represent a paradigm shift to a holistic instructional approach that re-defines educational "basics." The shift considers the needs of young people who are being educated for a world characterized by fast-paced change and global competition in high tech, collaborative environments where innovation and problem-solving are essential skills. Participant educators in this study recognize that school libraries are the integrative force for teaching curriculum content through skills acquisition to ensure delivery of a 21st century education.

A difficult economic climate is not the only challenge facing the educators in this study. They avoid simplistic solutions to educating youth in a complex digital world. They want more than minimal test performance of basic competencies for their students. Some school communities are asking, "Do we really need school libraries when we have the Internet?" Since the inception of Internet access there is a prevailing misconception that access pre-empts the instruction that is needed to educate youth to be competent and ethical information users in complex information infrastructures. This view is comparable to saying, "Do we really need schools when we have books?" When the Educational Testing Service

(ETS, 2006) administered the Information and Communications Technology Literacy Assessment to 6,300 students in 63 institutions, they found the majority of high school and college students lack critical thinking skills when researching online, judging the objectivity and authoritativeness of a web site, entering multiple search terms and identifying a statement that captures demands of the assignment. A recent anthropological study of the information behavior of university students, "Libraries and Student Culture: What we now Know," (American Library Association, in press) reports that the majority of students on all levels demonstrated significant difficulties when doing research. They overuse Google and have little understanding of how search engines retrieve, organize and display results. They misuse scholarly databases, failing to choose a database appropriate to the information task. They depend on simple searches and cannot build a search that yields the best sources. (Kolowich, 2011) They enter college with poor information management skills, unprepared to search, retrieve, evaluate, and utilize information. Clearly information literacy is not intuitive: Information users need explicit instruction.

The participants in this study are educators who conceptualize school libraries as 21st century classrooms that provide the information- and technology-rich learning environments prepare student for further study.

> *The kids come back, the kids who've gone to college, and say that they're so far ahead of everybody else because they've had to do this type of learning experience.* (Teacher)

They acknowledge that access to vast quantities of information on the Internet, and the technology that delivers information, necessitates an instructional program that helps young people develop traditional and multimodal literacy that equips them for a world of work that has been transformed by technology. Despite the rising cost of print, the expense of technological equipment and software, and staffing expenses for school libraries, the participants in this study value the work of school libraries as centers for digital, as well as traditional literacy.

The Educational Vision that Supports the School Library as Learning Center

There is a sign over the door that says learning center. It really is a learning center. (Science Teacher)

The participants' in this study hold beliefs about what students need to learn in the digital age. These beliefs inform the educational goals that drive their teaching decisions. They shape the essential elements of the learning environment, which influences teaching methods and tools, and assessment of student work. Based on the evidence from the twelve focus groups who participated in this study, we make the following claims about how school libraries contribute essential elements to traditional educational settings.

- The school library environment aims to provide equitable and stable information access to all, regardless of socio-economic status, and compensates for the lack of access to information technologies outside of school. The school library establishes a learning environment where students are guided by professionals to effectively utilize information and technology tools in ethical and safe ways. In such an environment learners are educated in digital citizenship to become ethical consumers and producers of information. The school library is viewed as an essential zone of intervention and socialization for learning how to function safely and effectively in the complex informational and technological world beyond school;

- The school library is a communal information center that supports investigation and experimentation with information and technology to foster quality teaching that empowers learning across the school;

- For faculty, the school library, as a center of learning innovation, conducts substantial, cost-effective, hands-on professional development to faculty and staff through the cooperative design of learning experiences that integrate information and technology with their everyday work to bring about the best learning outcomes for students;

- The school library contributes quality teaching in schools through the provision of inquiry-based instruction implemented through instructional teams;

- The school library is an extension of the classroom that offers a central, safe place that removes barriers and constraints to learning with information resources and information technology;

- The school library offers services that are different from those provided in the classroom: It connects information and expertise at the intersection of digital and print information within and beyond the walls of the school;

- The school library is not only a place for reading enrichment: It is the center for digital literacy as it supports the primary literacy of young readers and the emerging literacy of adolescents;

- For students, the primary focus of the school library is on *building capacity for critical engagement* with information, with an emphasis on asking, thinking and creating in the process of building understanding through the production and sharing of knowledge.

One principal observed:

Here in the library, I look at it as an atmosphere ... of learning, and most of all, for teachers. We really promote lifelong learning around here and learning is not only the focus for students, but learning is a focus for everyone in the school, including me. (Principal)

A framework for teaching and learning (Fig. 1) emerges from this study that describes the synergy between a school culture and educational beliefs when a school library is present. The outcome of lifelong learning, enabled by a school library, depends on the development of core capacities of intellectual agency: the construct of deep knowledge and understanding, rather than just fact-finding and collection. The disposition of lifelong learning develops for teachers and as well as students.
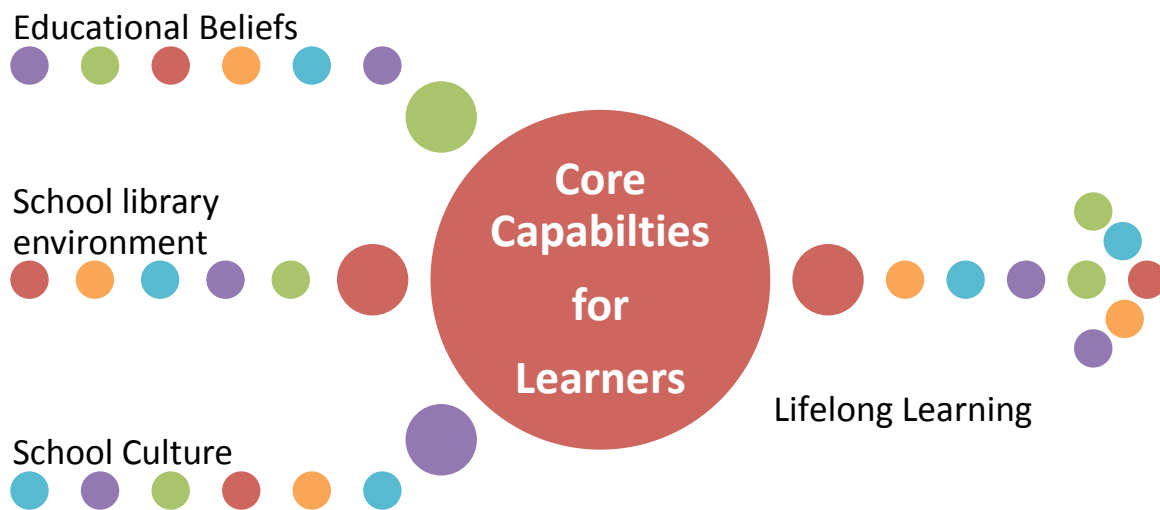
Fig. 1: Framework for Building Core Capabilities for Learners

Core capabilities that result from this interaction were identified by the focus groups as the following dispositions and abilities:

> 1. Resource-based capabilities: Seeking, accessing and evaluating information sources in a variety of formats, including print-based and digital literacies, social and cultural artifacts, and technological tools.

> 2. Knowledge-based capabilities: Creation, construction and sharing of the products of knowledge that demonstrate deep knowledge and understanding.

3. **Reading-to-learn capabilities**: Comprehension, interpretation, communication, and dissemination of text in multiple formats to enable the development of meaning and understanding.

4. **Thinking-based capabilities**: Substantive engagement with information through higher order thinking, and critical analysis that generate original ideas.

5. **Learning management capabilities**: Skills that enable students to prepare, plan, and successfully undertake a curriculum-based inquiry unit.

6. **Personal and interpersonal capabilities**: Learning how to learn related to the social and personal dimensions of learning; Learning about self as independent learner and self as collaborative learner, and the social and cultural protocols of participating in inquiry learning.

These core capabilities are the learning outcomes that result from the contributions of the school library to the education of youth. They indicate the school library as central to learning. Without supporting educational beliefs and a collaborative culture, it is difficult for the school library to be perceived as a learning center.

While school libraries are traditionally conceived as places for accessing and exchanging information, this was not the predominant conception of what school libraries are in the participating schools in this study.

> *I think calling it a library is not accurate – to me it's become a learning center that has resources. When I see students in here, they're doing research, maybe teacher-directed, but you know, I see a lot of them come in just to find out general information, to learn something – maybe not related to school, so to me it goes far beyond what we think a library was and the place is always hopping.* (Principal)

Certainly there was the recognition that the physical space contains a range of information resources, structures and systems that provide access to information and technology. However, the predominant activity observed in the school library was not information-centered; it was the learning in which students were engaged. There were 209 references to learning in the focus group transcripts. Clearly "learning" is the organizing construct of their stories. It was perceived as the central mission, the central activity, and

the central outcome of the school library. A teacher observes that learning is the central mission of the school librarian.

> *… our kids know they can go to the library…explore projects, identify learning goals and learning processes that they need to go through in order to reach that learning goal.* (Teacher)

The school library is seen as a multi-disciplinary learning space where all subjects are represented and supported.

> *The library serves as a learning tool to support every avenue of education rather than … a microscope just supporting biology or a chalkboard just supporting note taking. So the library becomes more all-encompassing as a tool that supports learning.* (Language Arts Supervisor)

The school library is a communal learning center with something for everyone.

> *It really is the heart of the school because every department, and every teacher, every administrator, at some time, uses it for something. It's one of the few areas of the school that everyone actually utilizes…that's why it's so invaluable.* (Social Studies Teacher)

The mosaic of knowledge represented by the school library creates an environment where learning is respected and pursued.

> *I actually see (the school library) as a transformative place. When kids come into this library they understand that it is a place where you respect learning. Even some students who might fool around, or [not] respect another student, respect learning when they come in here … This is a place where you respect what other people are doing ...* (Social Studies Teacher)

The school library sets the tone for learning in authentic ways.

> *You have to bear in mind too that when kids like coming to a place where learning takes place, even though their reason for being here may not be learning, learning takes place. [School librarians] don't give a test, but when kids come here to have lunch and they are surrounded by books and people learning, [learning] becomes the norm.* (Principal)

Learning in the school library is viewed as process that is discovered as students pursue personal information needs as well as curriculum-related learning. The school library has helped them to learn how to learn.

> *We've got kids all over the place because they've learned the process of learning and that is focused from the media center.* (Teacher)

The school library is seen as a source of energy and activity that supports the school's mission to produce literate and informed learners.

> *This is the nerve center… the heart of school academically…the reading center.* (Social Studies Teacher)

The school library supports the school's goal to develop life-long learners.

> *I think all educators' goal is for students to be life-long-learners. Building on what _____ said, I think the library is the heart of that.* (English Teacher)

The school library's centrality is attributed to the work of the school librarians.

> *They just make it such a fun place. They make it the heart of the school.* (English Teacher)

A science teacher conceptualized the way the school library worked as a wheel that creates movement in the school community.

> *Being a science teacher, I like diagrams. Our library acts like a wheel – with the library at the hub – everything flows out and things flow back. From the library we go out to students, we go out to faculty members and other staff members. So that's my graphic; when I think of our library I think of a wheel, I think of (it) encompassing everyone in that design. It really is a good way for me to think of how the library works here.* (Science Teacher)

As the hub of a wheel, the school library supports a community of learners and the exchange of ideas.

I think there's a traditional view of what the library is – it's a place that's very quiet, it's a place where you can get a book, a place where you can sit in solitude. If you come into our library, you'll see that traditional notion has really dissipated. This is a central hub. It's active. It's loud to a certain extent. There are kids working independently. There are small learning cohorts that are ongoing. There are the media specialists. There are teachers who have come to this central location. (Supervisor of Instruction)

The role of the school librarian is central to learning because s/he is viewed as a teacher.

One of the things that I've tried to emphasize in my role is that the library and the librarians are not separate from the rest of the school. It's not a separate piece. It's actually the center of the school. Everything revolves around it. I hear (the librarian) saying that…being involved in curriculum decisions and helping to implement the curriculum with teachers is teaching. (District Curriculum Supervisor)

The unique contribution of the school librarian as teacher is the vision of learning through engagement with information and resources, but that does not happen by chance. The school librarian emerged as the driving force that establishes the school library as a learning center. The school librarian may make the vision explicit:

(The) media specialist articulated that she had a vision for what the media center should be: A place where people want to come and learn. However that (vision) may be, whether it's formal or informal, (the media specialists) share that vision, and therefore it happens. (Principal)

The vision may be communicated through observed behaviors.

… The media center [is]where you do education with students and not to them. And this particular media center had no books in it eight years ago and [the media specialists] had a vision, and they lived out that vision of creating what it's going to be. Everyone knows that when they walk in here, it's theirs. … (Principal)

The learning-centered work of the school librarian that enacts the vision plays a significant part in defining the school library as a learning center. It is the actions of the school librarians and teachers in the school that realize the vision, with the support of a principal who, "Lets the experts do their jobs."

I'd like to tell you what (the school librarians) do. They have a vision. We give them the tools and opportunities to live that vision out. We try to do that in aspects of our school. Unfortunately there are mandates and budget constraints that makes it hard to do, but it starts with having the right people in place and making sure we are hiring the right people who believe in the core values that we believe in: Running our school and having a vision and being willing to live and advocate for that vision, even though you know what the answer may be, but you do it anyway because it's the right thing for kids...Even though you're going to hear "NO" once in a while, you hear a lot of YESES by living out that vision. I think that's really the key component to everything that we do in our school. At least we try to do that... (Principal)

This principal sees the potential of a school library when the "right people" are hired. Teachers also recognize the talents of school librarians.

The extent to which the library can add to the learning experience is heavily connected with the talent that you have running the library. We're so fortunate here to have _____. [She] makes our particular library very successful and an integral part of the learning process. (Language Teacher)

Principals in the study identify the actions of school librarians as shaping, as well as supporting school culture.

...there are parts of a school that are a given. You know you're going to have a library. It starts with the librarians and how they are going to embrace their role in the school culture. And in this building, in any building [the library] is the center point. It's the place where things happen. Often times they just have meetings, like this one, but it's where things happen. So it starts with having media center people who will embrace the fact that they are going to impact school culture. ... When your school culture isn't positive ... they take some responsibility ... and when you have a very positive and healthy one ... they [are] given accolades and acknowledgement. ... That's a hard thing to measure because that's really measuring your commitment to school culture ...even though you can't measure [it] because they don't give a test, ... [school librarians] are impacting school culture ... (Principal)

Teaching and learning is seen as a major part of a school's culture, and principals acknowledged that their school librarians had an impact on teaching and learning that went beyond traditional methods. The principal of this school explained that investing in school librarians has enabled that school to push learning boundaries and take risks.

> *[School librarians] always putting flyers in our mailboxes ... here's what we can do for you. They give us examples and I think it's trickled down to the teachers in that we are a school that takes risks as educators. We do a lot of interdisciplinary teaching ... to see how one subject area kind of meshes with another. I think that our media specialists have enabled us to make that push - to be better at taking risks in the classroom and to do things that are normally outside of the box. I think their willingness to help us on projects ... has helped us to collaborate with other teachers more than what most other schools do.* (Principal)

In a world where every sector of the workplace is changed by technology and information access, the school librarian is a change agent for educational reform who prepares students for high tech workplaces. In addition to technical skills, the school library offers a learning environment that is not based on "the right answer," prompted by rote learning, but on a more complex model of teaching and learning that is exploratory and highly motivational because it challenges learners and educators to discover and innovate.

Teachers highlighted the sustained, active use of the school library, and this was confirmed by classroom use data that some school librarians provided for the research team. Students want to be in the library. They do not like it when the library is closed: They view it as a barrier to their learning.

> *They want to be here. They feel comfortable. They know that they can get work done. Closing the library for a few periods is a hardship to a lot of students and teachers because the library is used that often.* (Supervisor of English)

Students like the informality of the school library environment where they can walk around, sit where they want, and talk to each other. A principal notes his initial reaction to comfortable seating in the school library and the implications of the library as a learning environment.

> *...I [thought,] 'Oh great, that's exactly what I need' because I had just gotten rid of the sofas throughout the rest of the building where people were recreating. ...I never hear about a kid*

getting kicked out [of the library] or of any disciplinary problems in the library. It's a warm friendly place where kids and staff are welcome. And you never feel like any question is too silly. I regularly come down here and say I need information on something. Please help make me look smart! That's what I think our media center is like. (Principal)

The school library sets the stage for student-initiated inquiry.

The atmosphere, the culture, kids not being intimidated by [the school library]; Exploring projects, identifying learning goals and learning processes … in order to reach that learning goal. [Students] realize that this library is where that can happen, and that there are enough resources within the building, certainly within the library, where they're going to be successful in their search. I think, again, that it's just the idea that the kids enjoy coming in here. (Principal)

The school library allows learning to happen serendipitously.

…making this such a warm and inviting place opens it up for our classes. I think it makes it a much stronger environment for when we bring our classes here for different activities. It's a place [where] they already want to come. Some of them are reading, some of them are not, but there is so much more of a chance that they will pick up a magazine or they may stumble across a book that they would never be exposed to otherwise. (English Teacher)

The school library is also an inviting place of learning for teachers.

Just the environment, it's very inviting for all of us. Not just for the students but for the faculty as well. (Social Studies Teacher)

Teachers see the school library as a productive work space.

The library is the place where we have faculty meetings; We have in-service programs in here. And it's the feeling that I get when I walk in here that you know that you're going to get something accomplished … and you're going to learn. It's similar to what we tell our students about finding a place at home for homework that is conducive to learning and that you get accustomed to going to where it's quiet, [where] you have good lighting, you have your materials at hand. Well, we feel that same way about our library when we step in here. It is an area that is conducive to learning. It's well-lit. We have to move around where we have grade level teams or

we can move around to collaborate across grade levels. It's just a place where we can work together extremely well. (Principal)

School librarians build virtual as well as physical environments for learning. A school librarian talks about how she created a community learning portal.

> *A few years ago, [we] won a grant and were able to create our school's media center website and so we have our own domain name and we have our own server hosting outside of the building. We are linked to [district] schools… [with] a fairly regular schedule of events that are happening here in this space. There's the life skills web where the art show is going to be displayed [and] …a special workshop … is going to be held…* (School Librarian)

The innovative educational features of the school library cannot thrive unless the culture of the school supports innovation. What does such a culture look like?

School Culture and the School Library Concept

I think the biggest, biggest, biggest thing – that allows the school library to reach its potential has to be administrative support and vision. (School Librarian)

It is important for teachers, as well as students, to feel comfortable in the culture of a school. The construct of "school culture" is complex and multifaceted. School culture is typically defined as the school's shared beliefs, customs, and behaviors: The enacted shared beliefs and experiences that gives a school its persona and sums up its educational success. A large body of research suggests that the culture of the organization is a key factor in productivity and success.

> *This is the beginning of my fourth month in the district. I find the school to be more of a human resource model –it's an inviting culture – it's the whole school and administration that supports this type of culture. I found a home.* (Special Education Teacher)

A school culture that is compatible with the school library concept distinguishes between administrative and pedagogical functions, as indicated in this principal's "tongue in cheek comment.

> *In the center part of our school upstairs is the library and the main office is the center part of the downstairs and I always say that downstairs is where we ruin school culture and upstairs is where we make it.* (Principal)

For these schools, the school library is an important dimension of school culture, inextricably linked to the learning going on in the school and the learning success of the school. School libraries are "part of the way we do things here."

> *What is it about this school that has allowed the library to reach this status? I think it's a combination of teachers being willing to use the media specialists, teachers recognizing what a treasure these media specialists are, and ... an administration that recognizes the importance of the library and supports the library. That makes a real difference.* (Science Teacher)

What is the nature of a school culture that supports the school library as learning center? It is evident that the principal is central in shaping a school-library friendly culture.

> *I understood that the media center in a library would be the center of any great high school. And any good high school would feed off the energy of the media center. In early 2000 we brought these two [school librarians] in and we recognized that the media center was not only the center of the building but the center of the world. We had to open up our school to that way of thinking. Thanks to the progressive leadership we've gotten from our media specialists we've gotten that.* (Principal)

The vision and leadership of school principals provide an important dynamic in the central role that a school library plays in a school, despite the cost.

> *People have challenged me asking why we have two media specialists. These are tough budgetary times, as you know. Our governor is challenging us daily to do more with less, and we can point to the evidence of continuing increases in test scores, continuing increases in SAT scores, continuing increases in advance proficient ratings in our state-mandated graduation test. These things are a direct reflection of the work our media specialists and our content specialists have done with our students on a daily basis.* (Principal)

> Supporting principals have the courage to make a financial commitment to the school library.

Another important thing to point out is that we have made it a priority, our media center budget. It is not a secondary thing. We set up a regular budget line for purging our books. We don't have books out here that are outdated. We don't have books out here that don't belong. We do regular purging and regular buying of books that work for kids. I tell you that is a big, big challenge when you are cutting here, you're cutting a security guard ... The average Joes doesn't understand, but we are trying to keep our eye on the ball. And the nice thing about it for me is that I have so many people around here who give me daily reminders, including the media specialists. (Principal)

School librarians understand that principal support and investment in school libraries is critical.

[The school library] ... has to be a priority... I understand that there are a million competing interests in a school district and if the administration doesn't recognize the importance ...of strong school libraries to students' learning – then those libraries are not going to exist. (School Librarian)

School librarians appreciate that the principal is the key stakeholder who invests in the school library.

The other thing I want to say is that our principal has supported our library really well in the past. He did a sidebar for me a few years ago that really tremendously increased our budget amount. ... We went from 24 computers to 36 computers, which is really terrific because class sizes are increasing and that's an issue too, but he has supported the library tremendously and helped it to grow and move on. So I'm indebted to him for that and I'm indebted to the new media specialist for her skills because she teaches me, so really and truly it works well. (School Librarian)

Despite the heavy financial investment in school libraries supporting principals are participatory managers: They "*Let the experts do their jobs."* (Principal)

The support that we get is kind of hands off – I think unequivocally – I believe that the administration believes in _____ and me – so knowing that trust and support is there really, really makes a difference. We are also ... fortunate – we have a very decent budget – and we're given control over that budget. They don't say you need to spend "X" amount on books, and "X" amount on _____. The budget is ours. ... We submit our budget and no one ever comes back and says: "Oh, why are you doing that?" We've

bought on-line databases, books, whatever, and so the support we get is just incredible, and it really has been instrumental in helping to make library what it is. (School Librarian)

A School librarian values a principal who practices participatory management, who understands what an effective school librarian looks like, and who provides other forms of support in addition to adequate funding.

> *...the definition of a good school administrator, from the perspective of a school librarian, is someone who hires the right person, gives them resources to do what they need to do, then gets out of the way and lets them do it. And I would have to say that's pretty much how things work around here. And it goes beyond getting out of the way. The principal in this school steps in and helps – if necessary – to get things to where they will work, so you know, the budget, the scheduling, any kind of encouragement – the permissions to do things _ encouragement to take risks – ability to get out and do the outreach, and participate in things. It's an administrator who understands, and doesn't put up road blocks ...* (School librarian)

The principal as leader is able to engage teachers in this vision and culture when teachers view administrators as leaders. In order to do this, supporting principals are able to nurture a school culture that supports the most effective operation of the school library. Teachers are cognizant of whether the principal is committed to the school library and the ways in which s/he supports it.

> *I think that one of the things that allows the library to be this way is that we have great support. I really do believe that Media Specialist 1 and Media Specialist 2 can say 'this is what we need' and go to the appropriate people and if it's possible, then it's done. And I think that is one the things that has allowed the library to be this way.* (Social Studies Teacher)

Teachers are aware of the framework of school culture that accommodates the logistics that need to be in place for a school library to work.

> *... when you talk about establishing a framework within the school if you want the media center ... to [be] a place ... where people can come, not just ... at a set time, you have to develop ... the schedule. ... I think we've made attempts to do that, where [the school librarian] has open blocks*

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for extended periods of time when kids could come in and do a bit of additional research, or come to get books, whatever it might be. … We … love … people coming in and out [to] get resources. We … love our media specialist to be collaborative…but if you don't have that framework I think it's just words and we've taken action to make it happen. (Fifth Grade Teacher)

Faculty support of the school library is a function of a culture of community, as well a function of their educational goals for their students.

I think this is a very supportive faculty staff and administration … I think we present to the students a united front in what we value … The library is high on the list of things, including the love of reading, how reading supports [learning], but also reading for pleasure. Instead of playing … electronic games, or watching TV … you can actually sit with a book or a Nook or a Kindle and read for pleasure and I think from the top down and the bottom up we value the library and what it has to offer in all aspects of peoples' lives … [The school library] impacts – it could if you let it – every aspect. (English Teacher)

Teachers want their classrooms to be more like school libraries: Places where they can collaborate and innovate.

I feel like [support] is across the board, not just for the library … I feel the same in my classroom. …if I want to try an idea I'm not bound [by,] 'No, you can't do that.' It's supported. I wish that up on the fourth floor … there were all sorts of resources and a place where teachers can talk about what we are doing in our classes … a kind of flow and we would start planning: A place where we can pull all of the resources [and] … say 'Oh, what are you reading? Can we do a piece of literature that is connected to what I'm teaching my kids? I think [the library is] a place, like a faculty center, a place dedicated to [collaboration]. So… the kids can see the connections. (Social Studies Teacher)

In this case, the teacher sees support for the school library as support for school community.

I don't have a crystal ball, but who would want to work in a place where they did the same thing every day, and didn't have opportunity to grow just like their students grow? If you only look at the students' side, or only look at librarian side, or only look at

administrative side, you're missing the really important part, which is how faculty works together. I think that's really critical. (School Librarian)

The school library is not an isolated, independent unit in the school but a collaborative opportunity.

That's a structure the school provided and I think it should be stated. Providing a collaborative approach to running the media center is critical piece to this design. (Supervisor of Instruction)

Teachers view collaboration as a supportive of their teaching.

I don't want to interrupt, but it's the support. We've talked about the team since the first conversation today. It's all about the team... (Teacher)

In one school library, teachers are assigned duty responsibilities, and according to the school principal, the teachers "love to be assigned there." According to the school librarian, this plays a role in enabling the classroom teachers to understand the workings of a school library and to build a stronger sense for a team approach.

I think one of the biggest things is that we have teachers who are on duty out there because we are running around doing a million things...I think that's really important to have a teacher who is available at that desk because we can't be tied down there and be able to do all the different things that we do. ...that also helps the teachers to see... [what] we do...if there is somebody that's up here helping us they say, 'Wow, did you know that the librarians do this?' (School Librarian)

It is no accident that effective school librarians operate in school cultures where teachers recognize the importance of their contributions to teaching and learning.

When I was hired ...I remember being brought around the school and it was a school like any other school and then we came around the corner and (the principal) brought me in [the school library] and I knew I was going to take this job... A school that values its library is a school that values education. Just looking around here and seeing the resources available, you know that the leaders of this school system believe in a strong library. (Social Studies Teacher)

Teachers who are supportive of school libraries understand the culture of help in the school library and its effect on school culture.

> It's a librarian who holds kids' hands to get through all of that – and I think the culture in this school directly reflects not so much the personality but the efforts of the librarian. (Teacher)

Part of the cultural dynamics of these participating schools is the high expectation that school librarians are primarily co-teachers, and undertake an active role in engaging in shared instruction in diverse ways:

> One very strong feature in this building is that the administration supports one-on-one teaching ... The importance of having one or two students and teaching them sometimes is valued just as equally as [teaching] a class. (School Librarian)

In addition to support from teachers to implement a school-library friendly vision and culture is support from district administrators. A principal talks about the importance of district support for school libraries.

> We're fortunate that (the Superintendent) is a big advocate for the media center. ... 'We should put bathrooms in our media center so not to send kids out.' You can't imagine how much that does to make this a welcoming space. When you don't have to ask for a pass ... [you] are treating people like adults. (Principal)

Principals who support school libraries have established an open culture for the exchange of ideas among faculty. They think outside the box, take reasonable risks, and try new things. They are delegators who trust their teachers. They see the school library as an innovation that can improve the quality of teaching in the school and they are willing to invest in this innovation because it brings educators together in a community of teaching and learning. An important element that enables principals to support a collaborative culture is trust. Trust was exhibited as a reliance on not just the actions of the school librarians, but a reliance on their integrity, ability, and character. It was apparent that trust was built over a long period of time. A school principal noted,

> When [the school librarian] comes to me, I truly respect what she's done and I know she's invested time ... and I know it's a worthwhile initiative. I have never said 'No' to her, and I don't know if I ever will, because of the expertise she has and her experience. (Principal)

The principal explains with an example.

If [the school librarians] came to us tomorrow and said, 'We don't want anyone to eat lunch in the media center,' they wouldn't eat lunch in the media center. And if they said, 'We want them to each lunch in the media center,' then we'll let them eat lunch in the media center. And then their supervisor would advocate for that. We didn't even ask why. You're not going to see a place where people just want to eat lunch here. It's little things like that, having a vision. I'm okay with it. Those kids over here are eating and there's someone over here doing a research project and we can do those two things at the same time. [The decision] really comes from {the librarians}. (School Principal)

The librarian acknowledges that the trust of her administrator encourages her to try new things.

Yeah, and we feel that. I feel like we have the flexibility and ability to say, 'Hey we want to do something. We want to have something' and we run with it because we know our administration will back us up and they know that anything that we do … they're going to support. We know that we have their support and that's huge. (School Librarian)

School librarians view trust as confidence in their decisions.

We've been fortunate that the administration has supported us by having confidence in us. (School Librarian)

A school librarian views trust as autonomy.

There's a great deal of administrative support and support from the board to keep the funding static, even in these terribly difficult times. We did lose a part-time staff member, but the actual budget for materials and databases has stayed the same. A few years ago, it was improved a small amount … which goes along with the fact that I've been given a great deal of autonomy to take the library in the direction that I think it needs to go. That's trust. I think that's what keeps me happy, that's what keeps me here. (School Librarian)

Another school librarian views the trust of teachers as enabling them to be collaborative.

I think that there is a certain level of trust on the part of the teachers that allows it to happen – those teachers… who have been here and had a good relationship with the previous librarian, and [those] willing to trust a new person with their classes or students, or new people coming in who have that level of trust… And the fact that the teachers are collaborative, and we are a fairly I think a close community. (School Librarian)

A principal sees the importance of students' trust for the school librarian as part of school culture.

> *I think that for our kids trust is real important to them, and the fact that they can trust [the librarian] to find what they're looking for, it kind of works both ways. I think that's so important to developing the culture.* (Principal)

Teachers develop trust from a respect for the school librarian's expertise and experience.

> *I have great trust in her and she'll really spend [funding] wisely and she really knows what the teachers need.* (Reading Coach)

It is also clear that in these schools, school libraries exist within a culture of school-wide support – belief in the vision of the school library, trusting school library professionals with the freedom to enact their learning-centered vision, and ongoing support from principals and teachers. For principals it is about collaboration, culture, and community.

> *And I hope… that we can have the regular collaboration between the library media specialist and the teach\ers. This takes time and works best when built into our daily agenda, because if we don't, we're really taking a step back in terms of building that collaborative environment.* (Principal)

Educators acknowledge how the school library offers alternatives to the classroom that enrich their teaching.

The School Library is Different from the Classroom

The fact that I can send [my students] … to get support or find the resources, I think it tells kids look— there are answers out there. It's not a dead end. There are other options besides just the classroom. (Language Arts Teacher)

The school library has always been viewed as different from the classroom in its mission and operation. In its original conceptualization, however, it was not different from other libraries. It was conceived as a kind of special library that collected curricular materials for educators. Some of the participants in this study experienced how libraries have changed.

> *… What we knew as place that was like a museum and warehouse for books has now become a digital media literacy center.* (Language Arts Supervisor)

Somewhere between the transformation from warehouse of books to digital media, school libraries developed the concept of help characteristic of all libraries, to a formalized, instructional role for the school librarian. The differences between the content of learning, teaching methods, learning behaviors, and learning outcomes are noted in the data from this study, as well as the more obvious differences in accessibility to information sources and technology. Members of the focus groups in this study were eager to position the school library, with regard to these features, as an essential entity, different from, yet complementary to the classroom.

Although the school library opens doors to the information world through its diverse traditional and online collections, it was the access to information sources and technology that was most valued. The school library offers more choice than the classroom where the information environment is narrower in scope.

> …The [school library staff] has given us many choices for how to access information through video streaming, Safari, montage, United Streaming. We do not have this in the classroom. (Teacher)

Teachers saw the value of shared resources and services.

> Something else that I think [students]learn [that] I notice in high school, ninth grade, is … that the library is beyond the walls of the room. I think … especially with using databases they understand that they can access these databases from anyplace. They don't have to be in this room. They can access [databases] from the classroom, from a lab, or even from home, which is wonderful. … They can start to understand the value of shared services … (School Librarian)

Teachers think that the library provides resources that the classroom does not have.

> I think for student learning…when they're searching to inquire into a topic or look for answers… they might not be able to get those in my classroom (Language Arts Teacher)

The library itself was viewed as accessible.

> The students can come there in the morning before they have homeroom. They can … come during the day, they can come after school. It's available to them and there are things … they

want: Computers, books, there's the resource of [the school librarian] and many other things. So you have that for the students to choose from. (Literacy Teacher)

For some teachers, the school library was the only access to technology that is too expensive to provide for individual classrooms.

I don't have a Smartboard in my classroom. So when I'm doing instruction with laptops, it's very difficult to get that information across. Everything is online. But when I come down here … [the school librarian] shows the lesson on the Smartboard, and then the children work in small groups. … they've already had that lesson so they can go right ahead and start working on what they are supposed to be doing. And on the laptops we are doing a Webquest right now and they already have the understanding of the computer and the laptop. So their time together is to get the information they need for the Webquest. It's really a wonderful use of the time, whereas in a classroom, I couldn't do that in 20-25-30 minutes. I couldn't get it all in. (Third Grade Teacher)

Access to technology changes the content of learning in the school library. Students learn information and inquiry skills with the help of the school librarian.

When they walk in I think they do have a different perception of the room. And maybe it is because of the facility and the ease of getting on to the computers. Occasionally we have students who don't remember their password to log on but for the most part, they know the resources that [the school librarian] is telling them to go to. If she says 'World book' they know what that is. They've heard that before. There's a lot for them to get their fingertips on but they know how to get going. Today, we had a mini lesson but we could have just said, 'Let's continue' and they probably would have done all right with that. (Fifth Grade Teacher)

Access to the technology expands the world of learning, influencing what students are learning incidentally by virtue of being transported by digital technology.

I think the library is a gateway to the outside world. … We could Skype or have a virtual experience with students across the country, in North Jersey, or in other parts of the world as we all read the same book, go through the same research experience. What they're doing in Senegal is different from what we are doing here. Wouldn't it be nice [to learn] that I'm different from

you and you're different from me because we live in different countries – to look at how we learn and what we're learning and just have that sort of virtual experience in real time … That would be a really nice component in the library as opposed to in a classroom. (Language Arts Supervisor)

Students are learning information management skills in the school library, as well as curriculum content.

I think … kids learn … about plagiarism. So there's ethics included and we talk about that in our classroom as well. (Language Arts Teacher)

The school library is a home base for team planning for teachers where the resources are immediately at hand. The school library becomes the collaborative space for instructional planning. Some teachers saw the school library as providing a different instructional experience for the students – an experience that provides the stimulus to explore, inquire and to discover. Learning is constructivist and hands-on in the school library.

*For the group that we're bringing down here there's a sense that … we're not coming… to listen to somebody teach. Like today, there were laptops already set up so upon entering… we might ask them to gather here because [the school librarian] had World Book up on the Smartboard. … It makes it more, I don't know, it makes it feel more exploratory. Rather than sitting at your desks listening to your teacher talk about Native Americans, reading a book is much more individual. (*Fifth Grade Teacher)

The learning environment of the school library offers students a more relaxed atmosphere as they learn, and more accommodation for diversity of learning.

Kids come to the library for specific assignments but they end up being together in a learning situation that's a little freer than a classroom situation, where there's a little bit of buzz going around, where they are free to walk out and check their cell phones after school. …it's a very welcoming environment. It's beautiful place first of all. And the kids can come … and feel very welcome. There is a lot of diversity in here: There are a lot of different learning styles going on, a lot of different activities … This is a real learning hub … at the middle school. Classroom activities, curriculum, pedagogy kind of feed into that [environment] continually and reflect out from it. (Fifth Grade Teacher)

A key dimension of the difference between these two learning environments is the information-learning expertise that the school librarian provides. A teacher talks about how she is a co-teacher who helps her to cover the curriculum.

> *I love the fact that … we've structured library time to have open blocks and we're using tag time but the open blocks can be used for other enrichments. If kids need a laptop or [to do] research, [the school library] … is an extension of the classroom. If they need the computer—I only have two in my room - [the school library is] an extension of technology as well. So they can come down and utilize resources. And the last thing, [the school librarian] knows that by fifth grade we want our kids to be able to use PowerPoints, to be able to develop slide shows for presentations. So she makes it part of her curriculum to teach those skills to fourth grade as well so that by 5th grade we don't have to worry about that skill … It helps us.* (Teacher)

A common complaint from teachers who do not use the school library is the time-consuming nature of resource- and inquiry-based learning. In this study, teachers who were school library users noted that the school library enhanced the efficacy and speed of their instruction.

> *… The … Smartboard … speeds the instruction along. The student can spread out at the tables as opposed to a desk. This makes the facilitation of the notebook and the computer so much easier. The spacing within the library, that they're not right on top of each other, really helps to facilitate the learning … the small group can get enthusiastic here without disturbing across the room; it really helps. And with [the school librarian] doing the instruction it moves so much faster…* (Fifth Grade Teacher)

Working in the school library facilitates instruction so that teachers can cover more curriculum material.

> *I meet on day one and day six for what we call our enrichment period so the students who are participating in that, rather than meeting in my classroom … come down here. And [the school librarian] already has laptops set up for the kids and they have access to the computers along the wall. And for this current enrichment project they are working on learning about the Cherokee Indians, and we're going to make a Native American newspaper … from their findings … I really don't know how we would do it in our classrooms. The library becomes our home base … where we have all the books at our disposal and the laptops and the computers are already set up. If we tried to do this in my class we would have to wait for the laptops to be setup, warmed up, signed*

on, and you know everything's ready to go when we walk in [the library.]. So it makes it very easy for us. (Social Studies Teacher)

Teachers recognize how the school library environment affects learning.

I think that this is a unique environment in this building. … It's a place where you generate a lot of excitement. There is so much excitement, and our librarian does a really good job of generating that excitement. (Language Arts Teacher)

Teachers make connections between the differences in learning environments of classrooms and school libraries and the learning behaviors of students.

There are certain associations that we make with the library that are different from the associations we make with the classroom. [The school library] might be more open but kids are also more included to act a different way in a library setting than they do in a classroom, regardless of [why] they're going to the library. So I think that there are certain implications [for learning] that a library promotes that are much more useful to students because there's more to manipulate and they can go to an area that's more suited to make those manipulations, rather than to content specific classrooms where they may or may not know how to use the resources that are provided for them. (Language Arts Supervisor)

Another teacher commented that because of the different learning experience provided through the school library, students return to the classroom with a positive outlook to continue their learning:

And I see the difference when I take them back to the classroom. It's like they've been refreshed and there's a renewal in wanting to learn. (Language Teacher)

At the same time, the school library is an extension of the classroom to support enrichment activities and special needs learning. While one of the key differences between the classroom and the library is the scope and accessibility of resources, a teacher noted that her classroom becomes a library when the librarian brings the resources to her classroom.

There are so many people who want to get into the library for obvious reasons. We like spending time with the school librarian and the books. But if you can't make it in there, she'll put the books on a cart and take them down to your room. So if I'm doing a poetry project and we can't sneak into the library for a week, she'll bring the library to your room. The classroom turns into a library. And the collection is fabulous for as small a library as we have, for a middle school library. (English Teacher)

Extending the library into the classroom brings better access to information.

It's not limited to just the space either. It's mobile labs that [the media specialist] delivers to the classrooms, the individual laptop carts so that what can be done in a classroom sometimes is sort of an extension of what is done here. It's just available. [The media specialist] manages quite a bit of moving equipment ... (Language Arts Supervisor)

Another teacher noted how the library extends access to resources in the classroom.

I just want to mention something about the books carts. In science there is a mind boggling amount of information out there ... there is more information than you can possibly deal with, but the librarian manages to get all of the websites that we need for our projects, as well as a cart of books that we can take back to our classrooms. That helps a lot because when you are back in a classroom you don't just have a limited number of computers but you have a whole bookshelf of books that relate to the topic that can be part of the classroom set for as long as you are working on the project. So, there is a nice tie-in between physically being in the library and physically having those books back in your classroom. (Seventh Grade Science Teacher)

The school librarian transforms the classroom when s/he extends the school library beyond its walls. S/he also offers a unique learning environment in the library which goes beyond the provision of resources, technology, and basic information skills instruction. As the school librarian supports classroom learning, s/he also has a pedagogy that is unique to the library.

II.   The School Library as a Pedagogical Center

The School Library as Connector

The library connects it all and makes it happen. (Teacher)

The unifying concept of "school libraries as connections" was predominant. Participants saw the school library as a mechanism for bringing together and linking various aspects of the school. The library enables students to make connections between curriculum learning and their personal interests and the real world. It enables teachers to connect disciplines to provide a richer interdisciplinary approach to learning. It enables quality connections to the wider world of information, and it connects people to provide the best learning experiences for students. The connections are perceived to be "easy" because of the systems, processes and organization in place in the school library, and because of a philosophy and practice of "help" provided by the school librarians.

> *The library is a point of connection, whether we are talking in terms of a wheel [metaphor] or [in terms of] colleague-to-colleague or student-to-student. The kids see that the library is here and everything is a part of the library. Kids are always eager to come to the library whether it's to renew a book or to work on something using the computers and they know that there is always help available and it's not just with the adults.* (Sixth Grade Science/Math Teacher)

The school library connects with the values of a school district and with its school community.

> *The library serves as a reflection of school district values. Yes, it's fun and open and resourceful, current, serious _ it's all of these things and that's what you can come to expect within the [school] building. If the building reflects those goals, then all of those things are being supported in the classroom. The common mission of the building is reflected through the library and it sort of spiders itself out. The [students] you're sending to the high school leave sharing that vision or mission.* (Language Arts Supervisor)

The school library connects the school and home through technology, and through the relationships the school librarian establishes.

> *There is also that connection between library resources and with home research and I think that helps the parents too. I put those links to encourage students so there is never an excuse to get your research done.* (Special Education Teacher)

The school librarian is an information broker who connects people with resources.

I know [the school librarian] is very proud of the number of students and staff that comes in here to utilize the resources. They could go elsewhere, but she's made it so easy to access information … anywhere you want to get to, and I think the kids know that, and the kids really respond and come in here whenever they can. Sometimes we have too many of them in here. (Principal)

School librarians bring information and people together at the point of need.

I know recently that one of my students, as a side note, was working in the library, and had expressed some interest in the relationship between bulimia and ballet dancing for her sports paper … I think it's very important to maintain, not only … the book collection, but also the person who knows about the collection who can make those kind of connections, and I think [the librarian] is very adept at that. (Teacher)

The school library is a digital library that has no walls.

Location is not the issue anymore. I remember when I was in college I'd have to visit two to three libraries because they weren't connected at the time. Now, I don't have to leave my living room… What I like about what _____ said is that [the school librarian] tells you about things before you think about them. And that's the key thing today. She's opened up a wider world of information and opportunities that [goes beyond] the library here. (Principal)

The school library is multi-disciplinary: It is where the disciplines meet in a real world setting.

The library is the place where the disciplines meet. It's where the academic disciplines are integrated. In the classroom we sometimes become compartmentalized. Here, students can access info across disciplines, and I think that's a really important application of the knowledge that's happening in the classroom. They can come here and apply it in a real world setting. (Social Studies Teacher)

A Spanish teacher sees his language curriculum come to life in the school library.

I teach Spanish and we go to the library for a two week project in February. I find it helpful in encouraging the kids to open their minds and use Spanish not within these four [classroom walls] but in another site. I think that they're learning takes on a new dimension in [the school library] because they make the connection. We're doing a cultural project … in English, not in the target language, but they make the connection that, 'Hey, it is outside of these four walls' and

there's so much more to learning this language than verb conjugation and memorizing vocab lists. Hey, there's a real world out there in which I can apply that.' (Language Teacher)

An English teacher sees literature come to life as a book finds its historical, social, and cultural contexts through the school library.

> *[The school library] allows students to make connections between what we are doing in class and the rest of the world. In class, we're working on a book, and everything is about the book, the characters, and the themes and all of that, but then bringing [students] down to the library opens it up a little more, and we can kind of lengthen themes to other things that are happening in the world, and kind of see the relevance of it.* (English Teacher)

The school library connects people to each other as they learn together.

> *It's re-envisioning the space as the setting where people can come together to exchange ideas. If you come during lunch, if you come before school, or you come after school, that's the picture of what our library or this space has evolved into.* (Supervisor of Instruction)

Principals see the school librarian as a live connection with staff, students, and other librarians.

> *You can have a great classroom or a great library but if you don't have a great person running it, it's worth nothing … She's the one whose made the connections with staff and students and other librarians – she's very active in the county-wide library group, and she reaches out, not only in school, but throughout the state and the county. She's very active in making sure we're always updated on the latest databases we may need, or resources we may need, I don't think the place would be where it was today if it wasn't for her really superb efforts.* (Principal)

A principal confirms the school librarian's connection with students.

> *We work hard to get the people [school librarians] in here that need to be here and that could connect to students – that have the personality, the welcoming personality, so that was like a real priority and a real challenge for us to make that happen.* (Principal)

Another principal sees the school librarian as the connection between curriculum and students' lives.

[The school librarian] ... fosters that environment and makes things relevant to what [students] are learning. She ties things into real life experiences. [The school library is] an extension of the classroom and making the learning fun. (Principal)

The school library supports reading print and digital texts, and connects the school with the community. Reading activities connect real and virtual texts. Learning activities connect the school and the community.

...We also update [the website] with our most popular fiction choices, the books that have been circulating more through our ... catalog ... and the books that our book club has selected...This year there were 53 students [who] attended at least one book club meeting and that's really saying something... Our book club is a joint venture between [the school library] and the public library. The public library supplies multiple copies for us, and then through permanent loan [we] keep them here ... and so once one person ... starts talking about the book ... the circulation [of that book] ... gets bigger and bigger. (School Librarian)

The principal observes how the school librarian connects the school library with the public library.

We have a great connection also with the public library. [The school librarian] used to work there but with budget cuts in Cherry Hill she isn't there part-time anymore. However, she does have great connections with the librarians [there]. So a lot of our students participate in programs at the public library. I know [the school librarian] goes to the public library. As a matter of fact she and I saw each other there last night. It's really a terrific thing when you go to the library and you see students there. They make that connections between what they're doing there and what you're doing here _ that we're going for the love of reading. And if the kids get that feeling that going to the library is like going to a candy shop, it's really a terrific feeling. (Principal)

The school librarian's role as connector firmly establishes the school as connected to the community, the curriculum connected to the real world, and the school community connected to its stakeholders. In the role of teacher the school librarian makes the ultimate connection among the academic disciplines represented in the school curriculum and the instructional program.

The School Librarian as Teacher

As a principal I think we are so fortunate to have three people at the helm who actually look for ways to do more work every single day ... But they really see themselves as teachers and therein lies the difference. I see them out there in classes. The difference here is that they don't see themselves as support staff. They see themselves as teachers for 3,200 kids and for 250 staff members. They see themselves as key educators, fortunately for us, but very overwhelming for them. And I think that's the huge difference here. They are really teachers and that's a big difference from what you see in a lot of other districts. They're not support staff. They're definitely not. (Principal)

The primary function of a school library and the role of the school librarian is teaching and learning. From the perspective of the participants in this study, the school library functions primarily as a pedagogical center for students and faculty, nurturing intellectual growth, pedagogical expertise, and key learning outcomes. The school library is a common instructional zone for the whole school where students learn to learn through information, led by professional school librarians. The overriding function, as conveyed by focus group participants, is instruction, not instructional support, and not the provision of information. Focus groups portrayed the school librarian primarily as teacher who has the unique role of seeing the 'big picture" and pulling the academic disciplines together.

From a curriculum perspective, the library is the place where the curriculum gets implemented and not just pieces of the curriculum, but the whole curriculum. For me, [the school librarian's] ability to work with other teachers is very important for that. She's not seeing one part of the knowledge that we're trying to impart to students. She's seeing the whole picture and that allows her to bring language arts skills to science skills to history, and so on ... (Director of Academic Services)

The school librarian brings depth to learning by helping students and teachers develop information skills that lead to the retrieval and utilization of good information.

I think part of the focus that [the librarian] has brought to our building is that she really enhances another side of the learning spectrum for the kids. You can get information anywhere, it's easy and accessible now with the Internet. However, she goes more in depth with the students. She does a lot on focus, on how to go about researching and defining your search ... I know a lot of the teachers have research assignments and she spends a lot of time with them on that to help them out. That's definitely one way. It's not just cut and paste from the Internet. (Principal)

The expertise of school librarians facilitates the integration of skill and content instruction.

Probably the greatest asset is that all three librarians see themselves as co-teachers in every situation, instead of what we thought of as a traditional librarian. So I see that as our greatest strength. They are three individuals who truly believe that they are co-teachers …. They are impacting a very specific type of knowledge that they want the students to come away with whether it's research or media literacy leading to content knowledge. They are approaching it from a teaching standpoint which has not always been my experience. (Principal)

The school librarian cannot do this alone. Teachers open their classrooms in order to collaborate.

One of the things I can't go without saying is our staff. They're so willing to open up their classrooms to us to allow us to be co-teachers. And having been a classroom teacher I know how difficult it is to co-teach and to be a true co-teacher. Not just the four people in this room (obviously) but many of our teachers are really willing to let us help. I hear from so many librarians that they can't get faculty to let them help. And I don't find that with our staff here, which makes us very lucky. It is one of the reasons, one of the inputs [and] we wouldn't be successful without. (School Librarian)

Teachers recognize the value they derive from collaborating with the school librarian.

Thank goodness that we have these [school librarians]. As I said, they teach. [The school librarian] taught lessons for me and she is coming in to teach my AP class. It's so nice because the kids should hear other voices, not just ours. And it's student-centered, so it's nice that there are experts we can call upon to come in and that a quality lesson will be taught to the right people at the right time. (English Teacher)

In a collaborative school culture teachers see themselves as modeling collaboration for students.

I really think that because the librarians are co-teachers, for the most part, the kids get to see us working together… And I think that's really important. They get to learn how to collaborate, how to be curious and how to work through problems together. Maybe that's a hidden type of learning but I think that's one of the most valuable things that they get out of it [as we] model what we want them to be able to do in small groups and together as a class. (English Teacher)

As teachers collaborate, they are also modeling use of the school library.

Teacher model library use for kids … It's definitely an inviting place, just visibly. Teachers are always in and out of here and the kids always see that. There is a constant flow in and out [of the library] and I think that's part of the culture too. And the students see teachers and librarian working together as good role models for them. (Principal)

Teachers respect the school librarian as an educator with whom they can identify and on whom they can rely. The collegiality grows from mutuality of intent and shared experiences as teachers.

They're not just librarians, and I don't mean that in a negative sense, but they're educators. They're teachers. [The school librarian] teaches and that is the key. Because they are in the classroom with kids, or young adult learners, and they know what it's like. They haven't forgotten. They know the apprehension that we might feel. They understand when we're nervous about teaching something that's new to us, and they ease those tensions. And they make it a comfortable situation …. they go above and beyond for one teacher – and they're not just doing it for one of us – there are a lot of us. (English Teacher)

The emphasis on school librarians as educators was one of the strongest notions emerging out of the focus groups. Specifically, it was the school principals who voiced this. One principal judges the quality the school librarian as teacher as a measure of the quality of the school library.

We're still in a time where [the public] doesn't believe our information centers are as powerful as our educators believe. Our librarian is a powerful educator. Our information center is as good as the teaching that goes on there. (Principal)

Principals are willing to support the acquisition of resources for the school library with an adequate budget because they perceive the school librarian as a good teacher. The fact that they are good librarians in the traditional sense is secondary.

Well, obviously [the school library] is well organized and from an administrative perspective, it's financially well supported. The library is stocked with resources and that continues year after year… and the librarian does a great job of selecting pertinent resources for kids … But most importantly, our librarian is a teacher, and works so much in an invaluable teaching capacity. (Principal)

A school librarian sums it up, and provides a challenge to the whole school library profession to participate in students' successes in the role of teacher.

> *Seeing the librarian as an educational leader is one reason this library is so successful. There are so many places where that is not the norm. [Some] librarians have not been given the open door to that kind of a role and when the door [is opened for them,] they don't step in. It's not who they are and you know, that's a difference in people's personalities. But the confidence in the librarian as an educational leader here really impacts so much of the students' success.* (School Librarian)

The school librarian not only teaches, but takes on other dimensions of the role, such as attending meetings. A teacher describes how the librarians act in an advisory role in grade level meetings.

> *…when we meet as grade level teams, [the school librarian] is freed up to come in and sit in and actually be a resource for us. We can say, 'Hey _____, here's the unit we're working on. Can you find some resources? Do you have any recommendations?' If she can give us recommendations, that's great. [If not,] she will go out and search and find those resources for us, which saves us a great deal of time.* (Elementary Teacher)

In addition to being a resource person, school librarians contribute valuable educational ideas and content to the meetings.

> *So, [school librarians] have sat in on many meetings and been represented and representative of the kinds of things that we can to do. I think that they help inform the path that we want to take. So for us…because of who they are as professionals, it works out really perfectly. Their philosophy of making learning and teaching better plays exactly into where we need to go. Having them as a part of our meetings…listening to their voices throwing things out, having them take things and run with them, has really enabled us to go further faster.* (Principal)

Principals respect the quality of the school librarians' input at these meetings.

> *So the library is the place where we have faculty meetings, team meetings that involve the librarian, and we have in-service programs here. And it's the feeling that I get when I walk in here that you know that you're going to get something accomplished and you're going to learn.* (Principal)

School librarians participate in school life beyond the walls of the library.

> *(The librarians) are involved outside of the library. They are advisors and coaches. They are engaged with the kids on a lot levels beyond just in the media center itself [to] bring more kids [into the school library]. The [school librarian] is a soccer coach and the anime advisor, class advisor, school photographer, and [advises] the Knowledge Bowl and the lit magazine …*
> (History Teacher)

In addition to involvement with the extra-curricular activities of the school, teachers appreciate how school librarians step outside the library to help with class field trips.

> *Another thing that [the school librarian] has helped us with in the past years is with field trips [by] finding different plays that we can take the students to and not only helping to identify them but helping with every level of submitting paperwork and organizing. The past two have been scheduled for the fall. I coach in the fall so it's been extremely difficult for me. I wouldn't have been able to take my class had it not been for [the school librarian's] help. I know that there are other teachers who have had the experience as well. [The school librarian] extends learning beyond the school library's walls. It's an amazing opportunity that we have because of them.*
> (English Teacher)

Putting it simply, across all schools, teachers were in awe of the depth and diversity of expert knowledge that school librarians possessed and shared in a collegial and nurturing manner. They respect that the school librarians were active learners, experts in their own disciplinary domain, actively scanning the information and education environments for emerging ideas, trends, new technologies, participating in professional conferences to learn and to share new ideas with the school faculty. The school librarians were not just active learners in their own professional fields, they proactively learned about needs and requirements in the school, particularly as new curriculum programs were initiated. This active engagement built trust, further collaborations, and respect for the professional role of the school librarian. Teachers expressed their appreciation for a knowledgeable school librarian. In some of the focus groups this subject evoked deep emotion in the teachers and school librarians. Teachers were truly indebted to the school librarian who helped them to be better teachers and has helped them to help kids.

The School Librarian as Teacher of Teachers

There are so many different things that a media specialist is aware of and on top of and she lets the staff and the teachers know, which of course … turns over to the students. (Language Arts Teacher)

Teachers recognize that they learn from school librarians. As content area specialists they are keenly aware of the two important developments in education: 1) the role of information in learning as students spend more time in virtual spaces where they interact with information and create content independently or in collaborative teams; 2) the impact of technology in teaching and learning. They recognize that the school librarian is an information specialist and a learning specialist from whom they can learn.

A teacher talks about how the school librarian is a knowledgeable guide.

> *Having such a knowledgeable librarian is invaluable – and has been a source for me since I arrived here. I never feel that a question is too stupid. And that has a lot to do with a person who is secure with their own knowledge … [The school librarian has] helped improve my class and my research skills … Now we hear about librarians being replaced by non-librarians and that's very scary. We need someone who's knowledgeable to guide the teachers and to work with us. So, this to me has been invaluable, and that's one thing that's made this library successful: Having a knowledgeable person to guide teachers and to work with us.* (Teacher)

Specific examples confirm the broad spectrum of the school librarian's expertise.

> *Up until this year we were a Primary Years Program (PYP) of the International Baccalaureate (IB) and I want to talk about [the school librarian's] role in the school. She would go to every meeting. We have different units in the PYP program and they were related to science and social studies. And so for the last couple of years, [the school librarian] has gone to all those meetings. She has listened to what resources the teachers have needed. [The Primary Years Program] is a large proportion of the budget to spend.* (Reading Coach)

The reading coach provides another example:

> *Besides the teachers working so hard in our transition from our gifted and talented program, it's really with [the school librarian]. She has known these units so therefore she's been a wonderful resource to the teachers because she really has her hand on everything. …. She will do anything for anybody at any time. She is involved with anything. Nothing is too much trouble*

for her. *[The library] is a wonderful room, but it wouldn't be…without [the school librarian].*
(Reading Coach)

The technological savvy of the school librarian is another example of breadth of knowledge and skills that benefit everyone in the school.

We are wireless in here. Any kid can bring any device in here and get on the Internet. How many schools do that? But then, [school librarians] know how it works. An example was that we are starting to see more Macs and [the school librarian] said, 'I don't know how to use it.' So, [the principal] said, 'We'll get you training so that you can have the dialogue.' I think that's important because [with] the speed that [technology] is moving [school librarians] are willing to take the time to embrace that, so [when] someone comes in to ask a question, they can answer it. And school librarians value the opportunities they are given to further their own professional learning. (Principal)

Teachers value professional development and see the school librarian as a part of that.

Things change. I know it is so hard to keep up with things, but I think our specialists have done a good job keeping all of us in tune with the changing information literacy and technology literacy. They're doing a great job. (Teacher)

A teacher relies on the school librarian for technology expertise.

I think [the librarian] is very adept at her technology knowledge. We have many students who utilize laptops and specific software ... Whether it is a speaking program, or a reading program that they're working on, I know that [students] always feel comfortable that they can go into the library and someone can help them with their technology needs... (Teacher)

Principals recognize the need to provide professional development for school librarians that enables them to be good teachers and good teachers of teachers.

The key to having a successful library is the librarians and as a district we've recognized they are teachers. They teach and we provide financial assistance in terms of materials, but also for professional development. All three librarians have had extensive professional development because that's where it starts. They have to find out what's the most up-to-date thing happening

in informational technology and once they know then they can scaffold that as teachers. That's what everyone is saying about how they help the teachers. But they can do that because they themselves are professionals and they can pass that on in that procedure. (Principal)

School librarians model lifelong learning, especially in a dynamic, fast-paced field:

…It's important for us to keep up. [The administration] is definitely a big supporter of that. I know with all of our cutbacks it's been really hard to do that, but we have to stay on top of things. We have to go to school library events so we can learn about what's going on. (School Librarian)

Principals appreciate that the school librarian is up-to-date and delivers just-enough-just-in-time professional training.

I think [the librarian] is very knowledgeable about what she does, and it creates a very good atmosphere. And so up to date. (Principal)

Teachers like learning the technology as they need to use it.

We have fantastic media specialists who continue to keep up, to keep abreast with all of the new innovations in technology which is not always easy because things are happening so quickly …. But our media specialists will come in and will teach the teachers how to go about creating wikis; they will teach students how to access it. (Teacher)

A school librarian shares how professional development is woven into the fabric of school planning.

There are a couple of times when I've met individually with department chairs and they have been restructuring the curriculum within their departments and when we talked they shared with me. Then I gave them information that I learned at a NJASL conference or workshops we've attended: How we can collaborate and put these together so that when they are scheduling we know what the next step is. In this semester, this marking period, this part is being done (School Librarian)

III.   The Nature of Inquiry Teaching in the School Library

I think there's some broad assumption that because we're in the 21st century people understand [information searching], but do they know how to teach that, to impart this to

kids? The assumption that kids know because they're digital natives is one you can't make. (Supervisor of Instruction)

One of the biggest obstacles librarians face in the Information Age is the myth of the digital native. Teachers, however, know better: they observe the information behavior of their students every day.

> *It's the librarian who holds the students' hands and shows them how to find the knowledge they want. They don't know. The only thing they know how to do is go on Google.* (Language Arts Supervisor)

When students cannot successfully navigate digital spaces to find information and integrate it with their existing knowledge, they cannot learn independently from information. The school library contributes directly to quality teaching in schools through the provision of a unique kind of inquiry-based instruction that is based on research in the information and learning sciences and implemented through instructional teams. This inquiry-based instruction gives emphasis to intellectual agency for developing deep knowledge and understanding, rather than that of information collection and skills of finding information. Inquiry learning is the vehicle for covering the curriculum while embedding information skills relevant to the digital age.

Inquiry through Information Literacy

They model student-learning behaviors and inquiry processes. And they seem to be able to seamlessly do that, whether they're working with adults or students (Supervisor of Instruction)

The dynamics of learning through school libraries has for many decades centered on the development of a range of information literacy competencies. However, the concept of "information literacy" was not a unifying concept in these stories. While both teachers and librarians acknowledge the importance of developing a range of information handling skills, the most pervasive conception of the nature of learning through the school library was that of learning curriculum content through inquiry. The educational discourse on inquiry learning suggests a number of commonalities. Inquiry-based learning:

- Engages students' worlds to establish relevance, interest and motivation;
- Establishes background knowledge as foundation for new learning, and as a basis for generating a focus question that drives the research;
- Research task typically involves choice of topic, engaging questions, and choice of how to represent new knowledge through the discovery process;

- Engages students in critical thinking, examining diverse and conflicting information;
- Builds scaffolds to develop knowledge through Instructional interventions that develop thinking, problem solving; analysis; synthesis; reflection; and managing the research process.

Some teachers freely spoke of learning in the school library as one of inquiry whereby students learn curriculum content through interactions with information resources, technology, and the school librarian to apply their new knowledge and use it to think and create. They recognize the multi-modal nature of literacies that have emerged from the digital environment and the importance of addressing these literacies. In the quote below the issue of information literacy, and the attendant literacies needed to comprehend and interpret digital information, is addressed.

> *There's ...* media literacy, visual literacy, information literacy *—it's all sort of been under* the umbrella of 21st *century inquiry skills. ... So the Social Studies department is sitting* down with [the school librarian] to review *sort of an entire year. So if we are conducting* an inquiry-based assignment on the American Revolution *—you get the ... American* perspective, the colonial perspective. But obviously now you could also access *in an* instant [other] perspectives (What did the British think?) by crafting your search. You *know whether it's Google or another mechanism or portal to get that information.*
> (Supervisor of Instruction)

 Teachers recognize that inquiry learning is not enrichment: it is a necessity for going beyond rote memorization, which has little long-term effects, to thinking skills that are a critical dimension of education youth in a digital age. A teacher talks about the information search process as an explicitly taught tool to help information users transition from task initiation to presentation of the learning outcome.

> Our librarian teaches search process which helps students focus their area of study without feeling intimidated. They seem to get it *if they're caught in a section of the search* process. Librarians have a series of tactics they use to break down frustration so the *student doesn't waste time and can move on without being hindered and getting frustrated.*
> (Research Science Education and Science Teacher)

The Information Search Process is a research-based, diagnostic tool that presents a staged approach to information seeking and management in order to identify areas of intervention where students need help. These areas may be cognitive, affective, or behavioral when students engage

in interacting with information, or "doing research." Teachers allude to this process often in focus group conversations as they describe the difficulties their students encounter and the specialized help that the school librarian provides.

A supervisor notes the importance of the dual role of the school librarian in dealing with content and information skills.

> *You have to inquire within a library but you have to be capable in your content area. You also have to understand the network and layout of the library. So the librarian's role is two-fold: Supporting what goes on in every content area so that they know what's going on globally; and supporting the inquiry skills that students need to conduct research or to use software, to locate a book.* (Language Arts Supervisor)

The school library makes a connection between traditional skills and 21st century skills.

> *…The librarian's role is not only to be current, but sometimes to integrate what the library houses and to make a connection between 20th century way of learning and facilitating and the 21st century world of inquiry. Those [20th century] skills are still inherently human traits, e.g., inquiry, understanding, collective learning ... So even though the job market and the jobs and the things that kids are going to do might not exist, the things [students] need to … be successful   are skills that are cultivated by the librarian.* (Language Arts Supervisor)

 A supervisor explains how school librarians teach inquiry and research skills.

> *I would like to say they do two things exceptionally well in process. [The school librarians] spend a considerable amount of time planning for teachers to understand the research process and helping them align what part of the research cycle they might want to start with. They model for teachers what is good practice and do the same for students.* (Supervisor of Instruction)

An English teacher shares a teacher's perspective of the inquiry and research process.

> *[The school librarians] are also a resource for the students who are learning an inquiry process that is very sophisticated and really asks a lot of them. So beyond my classroom we have two additional resources in the building, [i.e., the librarians] where students can come and ask specific questions. So not only do [school librarians] lead and help*

structure and help plan the whole research process, but they also help [teachers]decide which topics to go to, which resources are searchable, [and] to help us plan. Then they teach it. They taught me because it had been a long time since I had done how to plan. It's a different world. They taught me to make sure that I could help my students, but they *are also an additional resource to the students all day long. So if I cannot be there with a student or answer a specific question, now we have two resources that are available.* (English Teacher)

And from the perspective of school librarians:

I think the one-to-one laptop program has offered us an opportunity to work with teachers in various discipline across the curriculum and it enabled us to infuse Web 2.0 technology and inquiry and project-based learning and those types of strategies into the classroom. And that has really been a great opportunity to build a center for inquiry. (School Librarian)

Another librarian talks about the Information Search Process and reflection.

We try to incorporate a lot of reflection in the inquiry process through the Information Search Process. We incorporate things [students] may not often see the value of right away, but once they go back and look at it later through blogs or whatever system it is, they see how they've grown and that's such a rich experience. *They can learn to be reflective learners and not just passive takers of information.* (School Librarian)

One of the key attributes of inquiry is building excitement, interest and motivation for learning, and engaging students in the active process of discovery and knowledge development. The learning dimensions of interest, motivation, involvement, and excitement for learning were shared across teaching areas. There was a common voice centering on the library as a nucleus for sparking creativity through inquiry.

Students on their own tend to Google and come up with questionable sources. I've *noticed it for many of the projects that I've done.* And it also relates to what _____ said *about [inquiry] sparking creativity. The students will be working on a project, and all of* a sudden they come across something that's related to it, and [say], 'Wow, look at this!'

or, 'Isn't this neat! Isn't this cool! It's amazing! I didn't know this!' All of a sudden they're calling other students over to say, 'Look at this, isn't this cool!" You can just see the spark, and sometimes that leads to other things and they get other ideas and it's just amazing when you see that happening - You know, that genuine student curiosity and interest. It's great. It doesn't happen all of the time [group laughter]. Let's be honest,. But when it does it's exactly what I was after. (Teacher)

Teachers talk about their observations of student learning through inquiry in the school library.

Three teachers note excitement …

We encourage the kids to explore, and once they start, you can't stop them and the excitement. (Teacher)

Engagement…

Once they get in to their work, the hardest problem is getting them out. (Teacher)

Students experience the growth of their own curiosity.

They go on and want to know more, want to find out more, and [they] have the research skills and abilities to do that. I think [that's] huge. (Teacher)

Working with library resources provides rich information and a variety of perspectives not available from the textbook.

I have done a number of projects in the library in all of the classes that I've taught. I think it's just a wonderful source of helping students locate and evaluate sources to use for their different projects, and to foster curiosity about their subject. [They] get different perspectives and find new information that is not provided in the textbook, or even by supplementary sources that I provide. (Teacher)

A science teacher notes the free environment of the school library where help is provided.

It's also because [the school library] is a freer environment. [Students] aren't afraid to open their mouths and generate some excitement about what they are doing. They feel a lot more at ease about asking for help and [students] give it freely to each other.
(Seventh Grade Science Teacher)

A Language Arts teacher notes how the librarian raises the quality of instruction through inquiry learning.

I think that this is a unique environment in this building. I was a high school teacher before I was a middle school teacher and I never thought I wanted to teach middle school. It was something new to me but I would never leave middle school now. It's a place where you generate a lot of excitement and our librarian does a really good job of generating that excitement. And the teachers: I've never seen people collaborate like this and pair up and get excited. And when the kids see the adults get excited they have no choice but to get excited. It's a good motivating factor. It doesn't work with every kid but it works with most kids. Most of these kids are getting excited because it is a unique culture in this building and our librarian really adds to that because _____ is a rare kind of librarian who adds to the quality of teaching here. (Language Arts Teacher)

Inquiry learning engages students as content providers: They create on- and off-line to produce products, or learning outcomes that represent what they have learned.

Here we have kids who are doing projects, interacting, writing scripts, recording things. It's just an amazing school and our library seems to be the beehive where a lot of that excitement gets generated. There is no place like this school's library. (Seventh Grade Teacher)

A teacher describes a senior project of global proportions.

One of the seniors this year wanted to contact other countries to develop an international cookbook. That comes from the research and the interest that's developed. The baseline is established and [students] know how to use the technology. [Students] have come to me and they want to make it a part of their history program. They want to study the foods of different areas on a global basis. … We've made this arrangement where we can hook up with another school in central Siberia. It was amazing, but again it's all kids taking it

*to the next step, and it has come from the use of the media center and encouraging them
to think and work and be successful - to step outside the box.* (Teacher)

A teacher talks about the teachable moment in the school library when the librarian encourages a research interest of a low-achieving student.

*I know recently that one of my students was working in the library and had expressed
some interest in the relationship between bulimia and ballet dancing for her sports paper.
[The librarian] overheard it and immediately suggested some other books that she could
read. This is one of my lower level students who isn't necessarily going to pick up [and
read] a book for pleasure. I know that was really important, because those kinds of
moments help too, and you need a librarian who is knowledgeable in young adult fiction,
but also other reference materials to kind of get them interested.* (Teacher)

A central dynamic of the inquiry process is students generating questions and exploring possible answers. School libraries spark questions and give students the freedom to explore them and construct their own answers:

*From the perspective of the building administrator, it's nice to have someone with the
knowledge and experience that [the librarian] has… I think it adds to the culture of the
building that our students feel comfortable coming [to the school library.] They feel comfortable
asking questions. They are not inhibited by a concern that their question isn't the right question
to be asked in the media center.* (Principal)

Students are also not worried about getting the 'right answer,' but in exploring multiple answers without fear of being wrong.

A Special Education teacher notes:

And it's a place where they are safe to ask questions. (Special Education Teacher)

The school librarian explains how her teaching supports a safe learning environment.

We can break that step down to show them. I think they're great at not adding too much at one time. They're good at adding one step at a time. I found when I take in-services, if someone wants to talk about a blog, they start to talk, and the language is over my head, I feel like an idiot and I'm nervous about proceeding. The library doesn't do that. We start, we break it down, we do one thing and we make sure we're successful. Then we regroup and we add one more component. So everything is, I think, broken down to its simplest form in language that's understandable and relatable to the students and also for the person teaching it. (School Librarian)

Students recognize that inquiry-based learning is hard work:

I think teachers learn that inquiry, true inquiry is uncomfortable. It's not easy. They will struggle and that's normal. And they see us struggle. We're very transparent about the struggles we have in finding information and in showing students that information seeking and evaluating is often a struggle and that true inquiry and exploring questions is difficult and challenging. (School Librarian)

Students benefit from a well-developed concept of help from the school librarian.

Well, [the school librarians] ask a lot of questions. They don't assume students know something and then they use internal thinking – meta-linguistic questioning – so you can tell they are modeling what a learner would need to do. When they walk away, as well as when they're working with me or another teacher, [the librarians] are asking direct questions to help us formulate where the research is going to start, where it will get hung up, and where it will end. (Supervisor of Instruction)

The school library also fosters collaborative learning in this environment of help.

[Students are] learning how to work with each other and support each other, and how to ask questions and get the help that they need and how to share. (School Librarian)

The learning is also self-directed; students take charge of their own learning.

And they do work. They learn to build the bigger picture through discovering the facts, and as a teacher, I get them to focus on big questions that they want to ask and be part of their research. They love doing that – it gets them so involved in their own learning. (Social Studies Teacher)

Students' capacity to undertake quality research through engaging with information was recognized as an important aspect of learning in all curriculum areas. The instructional role of the school librarian was explicitly linked to improvement in students' research capabilities. This is something that does not happen through a small number of research tasks, but is developed over a sustained period of time.

I find that … first research project they do is a little sketchy. Some of them are good. Enough of them are average. I find that as we go throughout the year, by the second or the third project their research skills are improving a lot more. They're able to come in here and very quickly find the sources they need [and] evaluate the sources. .. I find that students who may not be very strong academically improve their research skills throughout the course of the year. By the time we get to that second or third project the quality of the project and the quality of the research is much better that it was initially. (Teacher)

Teachers understand that acquiring information and research skills is a slow and gradual process.

Students need to see the proper steps that go into research and selecting quality information, and they gradually learn that. We hope these students will move on to higher levels of learning, but if they don't have that background they will be lost. (Social Studies Teacher)

Students find their own style of research within a structured framework provided for them.

I think that kids start to develop their own style of research here too because everyone is comfortable with different means. When I work with the Harlem Renaissance project there are a lot of different resources you can use. Most kids in middle school only use computers … In the eighth grade I start to see them all over the place. … Why aren't they using the computer? They know how to access different things so they approach things in different ways using the style that works for them, and we see them gradually improving with their research processes. (Language Arts Teacher)

A Social Studies teacher talks about how 9th graders learn to evaluate information.

I think they learn to research because we start them at 9th grade. … I think one of the things you can see is that there is such a wealth of information and it's hard for them to sort through all of the information to determine what's going to be useful … I think one of the valuable things that they do is really learn how to research, focus on what they are looking for, and evaluate [information.] 'Is this going to be something that is going to be important for this assignment that I'm working on?' That's a valuable skill that they need to have if they are going to go to a four year college or really anywhere: To be able to determine what is going to be useful. (Social Studies)

A science teacher describes a scientific literature review project that leads to investigative research.

We teach a research class where students do independent research to develop scientific protocols. They access a series of databases to do a scientific literature review and proceed to create a protocol which is going to lead them into investigative research. We've probably had 30 to 50 students participate over last 5 years in that research, and the outcome is not only a report but scientific investigation that lasts another 6 to 8 weeks. As a result of having access to the databases they learn how to use [them], how to select full-text articles, and how to put in for library reserves and interlibrary loan. They have access to not only what we have invested in the high school library, but also in professional communities. Some students here will go on to do high level academic research. No doubt in my mind we'll have students here get their PhDs at probably an earlier age than most. They have true research skill – being able not only to conduct scientific research, but being able to access other people's scientific research is extremely important as a scientist and we've been able to have students participate in that. (School Librarian)

The staged process of inquiry-based learning is valued by classroom teachers. Students are not left to their own devices to undertake substantial research projects. Rather, the inquiry-centered instruction provided jointly by collaborating teams was carefully planned and staged to take students though a research journey, carefully diagnosing particular learning needs to ensure successful research.

An English teacher describes how research is taught as a process.

If I tell the school librarians I need to come here and I want to work on Glogster, we try to troubleshoot what age level we are working with. What kind of previous experience do

they have? So we start very basically. We've broken it down, especially with freshmen. We can't have preconceived notions ... We really need to sit down and break it down to the simplest form to make it accessible to kids because when they hit road blocks they get easily frustrated and then they're off in all these other realms and not really on task. What the library does great is to tell us where we could hit a road block when putting this particular program in place. (English Teacher)

Teachers see the connection between what their classroom teaching and inquiry learning in the school library.

We really see the connection between what we're doing in our own classrooms and what we could possibly do [in the school library]. It's a great experience for students to not only learn how to research, but to learn how to explore and inquire through various media - to have somebody else who is a support and a guide and a facilitator, besides the classroom teacher. Because the classroom teachers have so much to do already, that collaboration is highly effective. I look at that as one of the strengths of our current program. (Teacher)

Part of the inquiry-centered approach to learning through the school library is modeling the inquiry process with teachers. Teachers are trained in the process of doing research by the school librarians.

[The school librarians] spent a lot of time with us understanding the components of discovery – a metaphor for good research. ... They made sure we knew process and the tools and how to use them in the context of any class where a teacher would want to use research. We can model effective research for the students. (Supervisor of Instruction)

It is clear that not only students have been engaged in an inquiry-based approach through the school library. Teachers as well have honed their capacity for inquiry.

Basically in Guided Inquiry for students and teachers [the school librarians] ... are guiding you along the way, and they're helping you breakdown pre-conceived notions of something you need to research. I think of the library here as a think tank. My role is different in the school: I co-teach science, English, and history classes so when I have to come in and think of a new creative project, and I am not sure of what's new and what's

hot, because I'm stuck in another realm. I can say to [the school librarian], 'What's new that I can try to integrate? … What are new things we can integrate for the students?' [The school librarians] will guide you … which makes it less intimidating as a teacher to try new resources … That's true inquiry. (Science Teacher)

Inquiry through Collaboration

Thank you very much for everything you've done, because it's made quite a difference, which I really appreciate. What students have in the library is the form of the library and the function of their study in class, which are intermingled so it's seamless. (Teacher)

In this study, a key criterion for selecting the schools was the high levels of instructional collaboration reported in these schools, and documented in Phase 1 of this study. For the purposes of this research, "collaboration" refers specifically to an instructional collaboration, where school librarians and classroom teachers have been involved in the joint planning, creation and implementation of an instructional unit targeted to meeting curriculum content standards. Instructional collaboration between school librarians and classroom teachers is presented as one of the success factors behind increased student achievement. Through such collaboration, it is argued that students develop a range of information literacy skills in relevant and meaningful ways. While there is considerable professional literature encouraging school librarians to engage in classroom collaborations, and extensive documentation of exemplars of collaboratively planned units integrating information literacy instruction and curriculum content, there has been little teasing out of what constitutes the effective dynamics, processes and strategies of classroom teacher – school librarian collaborations in order to articulate a richer basis on which effective collaborations might be built. In this study the focus groups were not explicitly asked to address the collaborative nature of teaching – its dynamics, outcomes and the like. Rather, it emerged as the central dynamic of enabling the school library and the work of the school librarian to be integrated so widely and so deeply into the learning fabric of the school.

Teachers talk about collaboration with the school librarian.

> *[To the librarian] it's a model of cooperation and 21st century skills. How many times have I come to you with a project before it's even fleshed out? I wanted to do something in terms of glaciers. I asked, 'Do you think we could have students discover something about global warming if they researched glaciers all over the world?' and that was just brilliant. It worked out terrific. I want to do that again this year.* (Teacher)

Teachers recognize the contribution of the school librarian's expertise in research and digital technology as critical to the collaboration. .

> *They're particularly helpful in English class, but in any subject area. We all would like to have the time to become experts in those places, but from a personnel standpoint, I really think we need someone here who is an expert in the research and can help the students go through the digital landscape and sort the good from the bad. While I can do that, it really helps to have a place to go where that can be modeled for [students] and they can move directly to the computers and do it right there themselves … It is a good model of complementary teaching.* (Teacher)

Teachers are appreciative of the school librarian's support. The consensus is that collaboration is the key ingredient in the success of school libraries in these schools.

> *The collaborative teaching role of the school is key. The other part too is that [the school librarians] are exceptionally proactive … You'll say I want to do a project, you talked about the interdisciplinary stuff, you'll think, 'Oh, I need the library to help me with this or whatever and what you really find out is that they are telling you about all of the other ways they can help you that you haven't even thought of, like how to cite things in a research paper, or… it's not just technology stuff it's also about finding the materials that you haven't even thought of. They are helping you build your lesson. You're not just coming up here and saying here's what I want you guys to do. They are helping you build that lesson.* (History Teacher)

Students learn to collaborate by watching their teachers model collaboration.

I like that the students get the opportunity of seeing two adults collaborating, working together, even during a project: One [teacher] bringing up an idea that the other might not have heard or thought of, with the students present. (School Librarian)

Modeling the inquiry process has powerful impacts on students' learning.

I also think (students) learn trial and error is okay. Kids want to learn. [They ask,] 'What do I do to get it right?' We go through all the processes, such as copyright, and blogging. They learn what didn't work out … We have to go back to the drawing board … and that's okay … And they see [the school librarians] model that every day. It affects them tremendously. (Social Studies Teacher)

Underpinning the notion of "team work" and "team players" is the mutuality of working towards one common goal – enabling core curriculum content standards. There is a diversity of professional strengths that are welded together to provide the best learning opportunities for students, and where there is a sense of all members of the team moving in the one direction. People pull together and work, rather than trying to meet separate objectives and working in different directions. This requires considerable professional trust, negotiation, sharing of viewpoints and opinions, and stepping outside of the box to engage in collaborative learning. And it is not just talking about collaboration. It is actually doing it – being engaged actively in the "building" of lessons.

Teachers talk about team teaching with the school librarians.

The way that I work with [the school librarians] is almost like team teaching … [The school librarians] interact with teachers … as a team. Rather than me saying that I need this and they deliver it and I tell my kids about it, I say I need this, they get it ready, then we'll look at it together with all the pathways and resources they have found. … Then we work as a team on the [library] floor… as the kids are doing their research. … The projects can take several different forms. It can be a written paper … It could be a poster project where each poster becomes part of a larger project. It can be a PowerPoints presentation where they present their research topic. [The school librarians] put together all these resources so students can successfully develop their research. … They will also do a team teaching approach to a project. I think the success of this library comes from our librarians. It helps that we've had funding. No one ever gets as much funding as they want, and it helps that our librarians are very astute in finding free things. So the success of this library comes from the librarians. (Science Teacher)

The school librarian and content area teacher each brings his or her special knowledge to the collaboration.

We have a nice teamwork approach. I have my strengths as a historian, [the librarian] has her strengths and we work really well together. For example, we're doing a project now called 'I am the President' and the seniors assume the role of president for a year. They have to understand much more than the president's facts; they have to understand how they work. (Teacher)

The librarian is a partner in helping us get kids to understand what they are learning … That's one of the reasons I believe you see so many teachers using the library and so many kids using the library. They recognize that this is a place for learning. (Seventh Grade Social Studies Teacher)

Two high school principals provide rich examples of team work dynamics and its impact of expanding the instructional horizons of classroom teachers:

I think for me it comes down to … a strong co-teaching model where it's hard to know who the regular classroom teacher is, who the special education teacher is, or where one person's role ends and another person's role starts. In a good co-teaching model there is joint ownership of the lessons, presentation, of the learning that goes on, not just for some of the students, but for all of the students. I think what you see here is a true co-teaching model where there is teaming going on. So, what happens is, I think the librarians challenge the teachers to step outside of their comfort zone because they step outside of their comfort zone. … Recently we had one individual who was really opposed to technology - really not very supportive of it and yet after one of the librarians worked with this individual and created a lesson presentation, the person blogged … How did that happen? I think what happens here that I've never seen anywhere else is that these [school librarians] are educators. The librarians are not necessarily librarians they are media teachers. They're teachers first. And their role is entirely different here than anywhere else I've ever been. Because they are part of the growth concept. And they have challenged themselves to be on the cutting edge of what's going on and what teachers need. So what they do is challenge themselves to go out and figure out how best to service our needs. In order for them to do that, they have to listen very well, they have to be willing to get outside of their comfort zone and be educated, and then they work to integrate this through their teaching. (Principal)

The school principal views professional development as part of the culture of learning in the school.

> I think professional development … is the brain of the school. … I think that really
> speaks to [the school librarian's part in shifting our culture to being one of learning.
> (Principal)

The principal concludes that collaboration is contagious.

> It's the culture of collaboration, not only amongst staff but amongst students as well and
> I think it's contagious. Students see teachers and librarian working seamlessly together
> in class. Teachers encourage students to work together so it really is a collaborative …
> effort. Teachers and staff have their own study groups around this time on alternating
> Fridays in the library, so I think that collaborative culture permeates the school. … But
> I really think it's the collaborative atmosphere that brings us together as a school, and
> the library … is the center of that. (Principal)

A curriculum department supervisor describes it this way:

> Our media specialists will come in and will teach the teachers how to go about creating
> wiki; They will teach students how to access them. I know we had one of our media
> specialists working with our advanced academic literacy team [that] was an integral part
> of the … class. It was a class where we were allowed, as teachers and instructors, to
> take an idea and run with it. So together with the librarian we built [the wiki] page by
> page by page. …without the media center this wouldn't have happened. A big section of
> Advanced Academic Literacies (AAL) is spent on the researching so it is an integral part
> of the project, and it is a student-centered project. [Students] come down for several
> days. I guess it's up to six days now where they get day by day instruction from the media
> specialists about where to go for the best sites and information, which sites are good and
> why some are not so good. It's amazing, it really is. (Curriculum Department
> Supervisor)

And through the eyes of a science teacher in the same school:

I've been working with this school library for 21 years now. I originally did certain projects with my science class with the previous media specialist and I was horrified when I heard she was leaving, but my fears were put to rest when Media Specialist 1 came on board and it got magnified when Media Specialist 2 came on board. The way that I work with them is almost like team teaching. The way [school librarians] interact with teachers … is as a team. Rather than me saying that I need this and they deliver it and I tell my kids about it, instead I say I need this, they get it ready, then we'll look at it together with all the pathways they have found, different resources, working with freshman, sophomores, and juniors and then we work as a team in the library together as the kids are doing their research, putting together their project which can take several different forms. It can be a written paper, I'm a science teacher who will actually read a paragraph and grade it. It could be a poster project where each poster becomes part of a larger project. It can be a PowerPoint presentation where students present their research topic. They put together all of these resources so the student can successfully develop their research. (Science Teacher)

These stories illustrate the mutuality of intent, the importance of developing a shared understanding of the curriculum goals, and some of the processes involved in such team work. These collaborations do not happen by chance, and the participants established some of the factors that enable this to take place. These include:

1) Enabling school librarians to actively participate in a range of curriculum and grade level meetings.

2) Scheduling time for collaborations, giving school librarians opportunity to share their ongoing professional learning with the staff.

The long term impact is on "making teaching and learning better." Teachers believed very strongly that the collaborative team work with the school librarians had a significant impact on learning and teaching processes in the school, as well as learning outcomes of students.

Inquiry through Differentiation

Differentiation is what we're talking about here … you expect this from library media specialists – they are current with what is going on. (Principal)

The school library was portrayed as a common ground across the school for meeting individual and special needs. This was particularly identified by teachers of at-risk students and literacy teachers who saw the school librarians as providing targeted information and guidance to meet unique learning needs:

> Our library is also used after school hours for at-risk students to support their needs and learning. I think students learn to become self-reflective and they become self-motivated to enter the library and use what they've learned to do it on their own - maybe with a little bit of guidance but hopefully independently. Even though you have a resource [person] who directs you to where you need to go, you still need to be motivated to go there, to listen, to internalize directions, so [the school library] fosters life skills also.
> (School Librarian)

The special education teacher works to infuse the library into her classroom.

> It's been a difficult task and [the librarians] are so approachable and open to receive you ... As a professional, I really had to spend a lot of time during my off time with [the school librarian] explaining to me what I had to do. I really wanted to integrate this into my classroom and because of that, I'm glad we're able to use [the school library] ... but how do we use it -- how do we infuse it into our classrooms? ... How do you make science simple? [The school librarians] make it so simple you feel like you could teach another kid to do it. I have kids at multiple ranges. This kid is on the verge of a going up to the next level, and there's a kid who might never reach that level. But they're able to be met right where they are and they're able to utilize the [school library] program.
> (Special Education Teacher)

[School librarians] also helped this special needs teacher's students with computer literacy.

> A lot of times [my students] are ... behind other students. We've done different programs – gloxa - Google docs – Moodle. [The school librarians] have a great way of breaking it down in steps so that people like me who aren't really computer savvy can actually understand and instruct kids. They rely on the teacher's input for books added to the

library and have a section for reluctant readers with high interest reading. That really helps … (Special Education Teacher)

A literacy support teacher talks about using MP3 players with Special Education students.

[Our students] utilize _____ Community Library online … Now we have MP3 players and they utilize them too, which helps our learning disabled students … who need to listen to the books as they're reading them …. The interactive technology enhances the library and the students' ability to learn and interact …they start to love reading a little bit more. They see it in a different light. … [The school library] is a great place to be. The kids want to come here before school and after school. [Students] did a project last year with the database – and Noodle Tool to do their citation… All of that makes it easier and more comfortable for them. (Literacy Support Teacher)

All students benefit from one-to-one guidance from the school librarian.

…My top students access the library freely. [I also work] with some of the lowest functioning students who don't enjoy reading and don't have high reading levels …. The librarian has reached out to those students [by] buying books that are high interest, low reading level [and] that have audio-tapes so students can still participate in things like book reports. They can also access the curriculum. Also the students who have fears about the library… can sit comfortably at a table and do book work. [When they] go into the stacks and pick out books, it is traumatic. You can see it in their faces but the librarian is our resource. We'll see the librarian and he'll help. He's able to draw those students out and connect with their first book. For some of them [it is] the first book they ever … read on their own. That's an ongoing process. Even parents ask, 'What do you do? How do you get them to read?' The librarian is an important first step for them a lot of the time; He's helped for many years doing that. (Special Education Teacher)

Another Special Education teacher shares insights about how the school library supports literacy development for her students.

I think that not only have [school librarians] helped students learn … they will work with students individually to help them find books at their reading level, which may not be at

the high level. [The school librarians] use interlibrary loan to get books that are at [students' reading] levels. Also they show those kids exactly how to use the library … or show them how to find things or how to go on the computer to find things – that little bit of extra help. I know personally [the school librarians] they helped me. I just recently got my Masters in Special Ed, and both [librarians] have helped me find resources for papers for my thesis. They helped me with citations. They help me when I'm in my classroom, but also with my personal learning... I'm sure they've helped a lot of the other teachers in the building to complete graduate level classes and help them grow professionally as well. (Special Education Teacher)

The principal adds:

In addition to breaking it down – they adapt it to individual learner. We have many students who come in with diverse needs and diverse ways of getting it –they're able to take it and they can break it down, and if [the school librarians] have to change their mode of presentation to help that student learn, they're willing to do it. (Principal)

The Special Education teacher continues,

I know my students who may have been on a pull out level … They can come here and they can grow, [even though] they are only on a fourth or fifth grade reading level. They have the opportunity to find books that aren't baby books, books that are on their interest [level], such as exploring, or experimentation. When they find those kinds of books it helps them to experience and understand life as it is … and read and grow. I think that is so important because so many times those kids are not necessarily honored in a way that our media center honors them. I think that is also really, really important … differentiated learning … and our ability to meet their needs on multiple levels is incredible and it allows all of the students to maximize their potential whatever that potential is. So [the school library's influence doesn't bottom out…
it just keeps on expanding, and I think that is very exciting. (Special Education Teacher)

The stories of young people who might fall through the cracks because they are cognitively, emotionally, or socially challenged, raises a question. The school library, characterized by

collaborative and differentiated learning, provides the book, or computer, or magazine and the skills to use these learning tools.

Cognitive Learning from Information through Inquiry in the School Library

I want you to think and question always, whether you're looking for something in print or some type of an image or video. I want you always to be questioning who what where when why and think, think, think. (School Librarian)

Learning Content and Skills through Inquiry

Knowledge creation is the outcome of inquiry. Instruction through the school library first and foremost seeks to enable the teaching and learning of core content curriculum standards. The development of a range of information processes and research capabilities is a vehicle for learning curriculum content standards, and not an end in their own right, even though such capabilities are viewed as vitally important. Teachers across the discipline areas in these schools want their students to develop deep knowledge and understanding of curriculum content, and their collaborative instruction with school librarians serves that goal. An educator appreciates the role of the library in providing multiple pathways to gaining knowledge.

> *I know from my administrative capacity – overseeing several departments here, I think one of the things we're stressing is the idea of providing multiple pathways for learners to demonstrate understanding as opposed to traditional assessments methods that value memorization and recall - the idea of envisioning new ways learners can demonstrate their understanding. Can they put together a podcast? A multi-media presentation? It's just not putting something together because it looks pretty, but embedded within the [learning outcome] are core principles that students are learning. We are trying to reach all learners by creating multiple pathways and authentic assessments. The knowledge our media specialist brings – willingness to work with teachers, getting into classrooms, and inviting students to work, and being flexible ,,, has resulted in a diverse range of knowledge products presented in class.*
> (Supervisor of Instruction)

The school librarian comments on how content and skills instruction can be integrated.

> *It's done through world history, where I'm the most comfortable with the content. I have worked on several interesting way-outside-of-the-box kind of projects within*

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that context because I want skills taught in context - *I don't want it to be something that's detached from what the students need to know about history. So it was* creating history knowledge. *It's not just a project they're given in written form.* It has a visual component. *It's something they can identify with that's of interest.* It has a product, and they get to demonstrate their understanding in class on the white board *... it's library* orientation but in a different format, leading to students knowing history. I guess is the best *way to explain it.* (School Librarian)

The librarian sees the library as the place where the disciplines meet.

*It's where the academic disciplines are integra*ted ... in the classroom we sometimes become compartmentalized. Here, students can access *info across disciplines, and I think that's a really important application of the knowledge that's happening in the* classroom and being developed more deeply. They can come here and apply it in a real world setting. *(School Librarian)*

A Social Studies teacher describes a wiki project in history.

When I teach history I do a wiki project where [students] are producing wiki articles about something on the 1920s and (school librarians) have been absolutely fabulous *in terms of helping me and the students with the research and the technology ... to combine both of them into a finished project that is displayed on the Internet. ... Kids love it. It's a different way of get*ting the content to the students, and for the students they understand it better when they are doing a wiki or movie maker. *Because that's the way they learn, and they learn well.* (Social Studies Teacher)

The school librarian distinguishes between creating knowledge and transporting information.

So it was creating history knowledge. It was not just transporting information, but transforming information with new knowledge for them. It cuts down on a lot of *issues like plagiarism. There's no possible way* to plagiarize those assignments *because you have to think. And the kids like them because you have to think. It's not just a project they're given in written form. It has a visual component, it's something they can identify with that's in their interest,* and it has a product, and they get to

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*demonstrate their understanding in class on the white board. It's library orientation
but in a different format leading to students knowing history.* (School Librarian)

In this process of knowledge development, the development of a range of inquiry-based skills as part of inquiry fosters the development of reflective, thinking students. Because of the instructional emphasis on inquiry-based learning, some teachers and school librarians equated the instructional processes through the library as thinking processes – teaching students to go beyond the passive engagement with information and its superficial transportation into various products, and to be critical thinkers, reflectors and transformers of that information. The library was viewed, not as a place of information, but as a place of thinking.

The English teacher talks about what her students learn in the school library. .

> *I'll speak in edu-speak in terms of critical thinking skills. I made a little list
> of how to access information, how to interpret that information, how to
> classify information, whether it's by genre or types of publications that
> students can go to. So in terms of classification, they learn to understand the
> differences and nuances of a genre or anything like that. They learn how to
> use tools and technology and how determine purpose, academic integrity,
> respect for documentation, respect for how you represent yourself. They
> learn to think. They learn to think critically* (English Teacher)

Students learn how to handle choice in the school library, and to choose from a balanced collection that represents all points of view on issues.

> *A good library allows them to see…culturally that there are choices, and it
> teaches kids to think carefully though all of this -- that books or materials are
> not slanted just one direction or another. They're coming from different
> perspectives.* (Language Arts Supervisor)

An English teacher observes how students become more tolerant of different points of view, which she attributes to fiction, not informational text.

> *I think that many of them become a lot more open minded regarding the
> world at large, not just through the research but particularly through the
> fiction section. [The school librarian] has a wide variety of genres that the*

kids can read. [The books] sometimes have controversial topics. The culture here for talking about books has started to grow. You hear the kids talking about books that they've read. 'Did you hear about what happened in that book?' And that's nice to see - thinking about thinking. That's good to see here. (English Teacher)

A principal notes the effect of the school library ethos on student behavior.

This is such a place of seriousness and I think that the kids kind of treat it that way. When they're here, they act differently. They just seem to be more on their game, and it's all about academics and what they're learning from the educators who are teaching them here. They are learning to think through all of the information around them, develop their ideas. The main business in this library is thinking. (Principal)

Of all of the available resources through the school library, the participants focused strongly on access to and use of databases and the quality information that they provide. Database use appeared to be strongly integrated into processes of developing research skills, and learning to access quality scholarly information. Their use was often set up as a resource expectation by the classroom teachers.

I know the librarian is particularly proud of the databases and the digital resources for kids. With all of the information out there and students struggling to find it, we are very organized structurally. The librarian puts a lot into that. She helps to keep it organized and tailored to what the kids need and what the teachers are doing. From that standpoint, resources and databases are huge here and they play a big part in students learning about how quality information is organized. (Principal)

The library databases are seen as one of the library's strengths for a variety of reasons because they are exclusive to the library, but can be accessed from home or anywhere with Internet access.

So I'll say that for the bibliography you have to use different sources, so it forces [students] out and about instead of just grabbing stuff off the Internet, or just a book. They have to realize all the databases that are there. Four years ago, I didn't know anything about WilsonWeb. Then we added that and everything else. They have helped me too. I use them on my own for certain things. (Teacher)

The school librarian models how to use the databases using a Smartboard.

I find it's awesome when [the librarian] will model something on the smart board for the *students, particularly in terms of research, and using the extensive databases that [the librarian]* *is so knowledgeable about.* (Teacher)

Students learn information searching from demonstration followed by hands-on experience.
Again, she'd pull it up on the smart board and model how to go through the databases, what *happens when you put in certain search terms, what happens when you don't, so students could* *see the difference. The students would sit and immediately take the information that they learned* *from [the librarian] and go and apply it to their own search terms.* (Teacher)

The school librarian promotes the use of databases in interesting ways.

The databases are organized as brochures, on the mouse pad as well as given out to the teachers *to give to the students. It's a very professional looking piece of information. It's not just a* *worksheet or something written on a piece of paper… It gives a nice sense of sophistication to* *the whole process and immediate access is efficient and valuable.* (Seventh Grade Science Teacher)

Students learn about good sources, but they also learn how to streamline their resource list and narrow their searches.

They learn about the parts in the library and they assist each other that way. Initially in the *beginning of the year they all just want to Google search. They focus their searching with the* *right database, then narrow their searching using the teacher's links, so they learn how to* *streamline their resources* (Special Education Teacher)

Students become aware of the value of databases as sources of good information.

They learn what good information is, where to find it, and the value of the subscription *databases. [They also] learn the value of the exchange of information. They do learn this all at*

once, but they do learn it by the time they leave here. It's definitely implanted. (Social Studies Teacher)

Their teachers remind them to be discriminating users of information when they are in the library.

> *I've done assignments where I've used 'CountryWatch' and 'CultureGram' [when] I had my class researching the 13 colonies. They used various databases as well ... I tell [students] if they Google anything or Wikipedia anything ... they need to see what goes into the research and the quality of the information. We hope these students will move on to higher levels of learning and if they don't have that background they will be lost.* (Social Studies Teacher)

Teachers use what they learn about technology and information into their own teaching in the classroom.

> *We integrate a lot of the technology and a lot of the databases that the library has into our own teaching ... I'm [in the school library] pretty often so that's how it helps my students, the students in general.* (Social Studies Teacher)

Some school libraries provide access to databases outside of the school, extending the learning from the classroom to the home.

> *If they do have Internet access at home, they can access all of those databases at home. I know I do. When I'm prepping for my classes ...' Facts on File' is one of my favorites because ...it's so condensed and to the point. I use it as an introduction to something that I am doing with my history classes and the students also have [access] at home. The learning is beyond what just happens here. It's at their homes too and that's great.* (Social Studies Teacher)

An English teacher explains how information and research skills are scaffolded across the disciplines.

> *We do something that is called the CCWC, it's a cross curricular writing component that we do in many departments. The English department teaches the kids the skill that they need. The freshmen, for example, are doing annotated bibliographies and then when they get to be sophomores they are writing an MLA style paper that's focused on being a literature review. We are trying to build up to senior year doing a full research paper. In the first year or two they don't get the MLA exactly right, but they are exposed to it and they also learn how to use an internet database which I think is invaluable. To be honest with you I didn't know how to use*

JSTOR or an Internet database until I was a freshman in college. I don't know why my high school didn't provide that for me. *It seems silly to think about now, but I'm glad [my students] are exposed to {JSTOR] They know what it is and how to use it and I think that is great. It really provides them with the strong academic skills.* (English Teacher)

Learning content in the digital age cannot be separated from learning how to be information literate. As information moves from the printed page to the digital screen, learners need to have basic information skills to define an information need, search for information, evaluate what they find, select what is relevant, and apply the found information to a learning task to generate knowledge. Most importantly, they need to construct knowledge from information and apply higher order thinking skills (understanding, applying, analyzing, evaluating, and synthesizing) in order to create products, or learning outcomes in print or digital environments that represent their learning, These learning outcomes are assessed to determine what they have learned. Information literacy is a broad term to describe these skills: It includes basic information finding skills, thinking skills, and the multimodal literacies that ensure comprehension of what is read, in print or digital formats, and what is viewed and/or heard. These literacies include visual literacy, print literacy, media literacy, digital literacy, and technological literacies. A person who is a competent reader in traditional print environments does not automatically acquire other kinds of literacies that are described as transliteracies. A teacher expresses his understanding for why there is a need for school librarians to teach information literacy in its broadest sense.

There's … media literacy, visual literacy, information literacy –it's all sort of been folded under the umbrella of 21st century inquiry skills. I think there's a recognition that … you need to teach information literacy – but … not just for our school –but probably across the board. How many teachers are … fluent in, let's say, information literacy? (Teacher)

Information literacy is a type of literacy that ranges from basic searching skills that use logic and existing knowledge to sophisticated thinking skills that culminate in the synthesis of what has been learned which is commonly called "creativity." A principal notes,

Things change, I know it is so hard to keep up with things, but I think our media specialists have done a good job in keeping all of us in tune with the changing information literacy, technology literacy. They're doing a great job. (Principal)

Data from Phase 1 clearly indicate that information literacy instruction is extensively undertaken by school librarians in New Jersey schools. In this study, there was little reference to "information literacy" or "information skills". This is not to say that the concept was not discussed, but participants tended to focus on specific skills, rather than speaking more generically. This principal provides an example.

> *I think that one of the enormous things that students get from our media center is organizational skills. And I think that's an enormous part of learning itself - the way that [the librarian] sets up her lessons when she's doing things with the kids; the way that the library is set up. It's just that path, that organizational set, or skill set, that really brings it home for the kids: Research skills, planning skills, searching skills. Students are asking, 'How do I go about organizing?' That's an enormous part, to me, of the learning process.* (Principal)

Information organization and management capabilities encompass basic information literacy skills. The school library immerses students in a structured information environment. Engaging with this organizational structure and teaching search strategies to efficiently find quality information, to plan research, to organize research tasks and manage the information process, is valued by teachers and administrators. The school library models information organization and it is a framework for developing a range of information management and information organization capabilities. The organizational skill set is one dimension of a complex set of skills that are labeled as "information literacy."

A grade-three teacher observes how the learning conversations, along with organizational skills come together in the school library.

> *They're learning about an organized system in terms of how to find the books [they're] looking for ... Lots of times kids have trouble organizing things so it's a way of organizing and finding something specific. They learn organizational skills at many levels. And then, the library model over the years is [no longer] the quiet hush-hush it used to be because it's a much livelier kind of place ... I think they are also learning social skills about how to behave in a library and the types of voice and actions and learning conversations that are appropriate to a library environment.* (Third Grade Teacher)

Teachers observe that organizational skills gained by students in the school library help them stay focused.

I would like to say that I think that the students that leave [the library] with … organizational skill, [and skills for] staying focused and on task. I do see my students trying to be more focused. Going from a physical education [setting] into a classroom there's a distinctive difference. Coming to the library and IMC … I see the skills, and their focus [developing]. (Health and Physical Education Teacher)

An English teacher provides examples of how the school library structures an information organization task.

I was thinking of Diigo, which is a social book marking process. I teach AP (Advanced Placement) English to juniors – and that's been a great device for us. Students are building a repository of sources and can pull them out and comment on them. I can see [them] comment on each other's sources, making validating statements, and asking questions, and putting it in final form for a longer paper. [The school librarian] has been instrumental in helping me get that up and running with not only AP classes, but also with my freshman class. (English Teacher)

A special education teacher spoke of the advantage of learning about structure and organization of information for her students.

By the end of the year [students] have more places to go. They know where the bibliographies are housed, where the atlases are, and all the special books which are the nonfiction. They learn the parts of [a book]. There is no longer the card catalog, which they had when I first started here: It's all online. They do get a sense, even with my lower achieving students, of how books are housed in the library … I think, especially for the lower level kids, they don't see the underlying structure of things, They have to be taught it directly. For most of the students that I work with, they have to be taken to it and feel free to ask other people, whether it is an adult or a peer. 'Where can I go to find this? Will you help me find this?' Hopefully they are bringing that knowledge with them beyond middle school to other libraries. (Special Education Teacher)

Digital Citizenship through Inquiry Learning

The assumption that kids know because they're digital natives is one you can't make. (Supervisor of Instruction)

In relation to life skills, the strongest set of capabilities identified by the participants centered on developing capabilities around digital citizenship. This was strongly emphasized in all focus groups and

acknowledged by most teachers and school principals. Digital citizenship is clearly a topic in educational circles that is gaining momentum, and there is considerable discussion about what is needed to prepare today's young people to live in a collaborative, networked digital world. The data here indicate that this is central to the work and impact of the school library. Indeed, the instructional role of the school librarian is a significant mechanism for the development of students as digital citizens. This underscores the pervasive theme across the data – the role of the library as a pedagogical center that prepares students to live and work in an increasingly digitized, collaborative world.

In essence, digital citizenship refers to the behaviors, values and skills considered appropriate in relation to the access, ethical use and production of digital information, and using the digital environment to communicate, share knowledge and thrive in a digital environment. It has a number of essential capabilities and participants highlight a number of these as central to the work of their school libraries:

1. Recognizing quality information in multiple modes and across multiple platforms.
2. Accessing information across diverse formats and platforms.
3. Participating in digital communication in collaborative and ethical ways to share ideas and work together to produce knowledge.
4. Using sophisticated information technology tools to search, access, create and demonstrate knowledge in new ways.
5. Learning appropriate ethical approaches and behaviors in relation to use of digital technologies.
6. Understanding legal and regulatory frameworks that govern information use.
7. Understanding the dangers inherent in the use of complex information technologies and learning strategies to protect identity, personal information, and safety.
8. Acquiring technical and behavioral approaches to develop digital etiquette and security.

From the perspective of the participants in this study, it is clear that school libraries serve as a gateway to effectively, ethically, and safely participating in a globalized digital world. The participants acknowledge that students are already actively engaged in a technology-led participatory culture, including Facebook, message boards, gaming communities, and other online communities. They are using technology tools to produce new genres, mash-ups, and outcomes. Some are blogging and communicating across geographical and cultural boundaries. The voices in this narrative express concern, as they watch their students engage in online participatory cultures, that their students learn the dispositions, skills, and capabilities for working collaboratively in ethical and safe ways.

Against this backdrop significant contributions of the school library and the instructional role of the school librarian have been identified. Digital citizenship includes the important dimension of information ethics. This refers to the rights and responsibilities that young people need in using the ideas of others in the production of their own knowledge. School libraries give strong attention to students developing ethical approaches to information use, as evidenced in instruction centering on the appropriation of information, acknowledging and citing the ideas of others, and understanding the ethics of information ownership.

Teachers were clear that you cannot make assumptions about students being "digital natives" who are instinctively knowledgeable and capable of managing digital environments.

> *When crafting your search you know whether it's Google or another mechanism or portal to get to that information, and obviously I think there's some broad assumption that because we're in the 21st century, people understand they may understand this. [However,] do [teachers] know how to teach that, to impart this to kids? The assumption that kids know because they're digital natives is one you can't make.* (Supervisor of Instruction)

A teacher debunks the myth of digital natives.

> *I think that there's an assumption that because members of this generation are considered digital natives, that they're completely tech savvy and are able to use the kinds of programs that are in demand in our workforce. But when I have my freshmen come in, I find that a lot of them are not proficient in Microsoft Word, they're not proficient in PowerPoints, they are not proficient on the Internet. What they're good at is social networking, what they're good at is using technology to communicate with one another, which I think is appropriate for teenagers, but I think we need someone like [the librarian] to show them how to use these things in an academic way and in a productive way, eventually in the way they're going to use them in the workforce. I would suppose the outcome that I see is a progression … from freshmen year to junior year of their ability to use these kinds of programs. I think that's also important, that you have someone who is extremely proficient on the computer in these kinds of programs modeling these things for the students every single day. Seeing that difference between freshmen and junior year is something that I have noticed.* (Teacher)

A supervisor notes the specialized nature of teaching students about information.

The school librarian agrees.

This is going to sound awful because this is the sort of thing that everyone wants to avoid, but how do you copy and paste – legitimately, when you need to use and credit an image. Surprisingly many kids don't come here knowing that, so despite the fact everyone says students are digital natives – they're not all. (School Librarian)

The participants expressed deep concern for students as safe and ethical users of information and saw that the school library is the central dynamic for enabling this. The library was seen as a microcosm of the complex information landscape and a place where appropriate ethical behaviors could be taught, modeled and developed.

During the first few weeks of school we have all the kids that come in and we talk about Facebook and cyberbullying. We are starting to have kids contribute to wikis, contribute to what each other is writing. Again I'm hoping that that develops a bit more as they learn these ethical skills. (School Librarian)

School librarians explain their role in developing safe and ethical information behavior.

The kids need to understand that, and we go through this several times over the year, that when they are out gathering information, someone has put out the effort to put out that information and they cannot take credit for it. You're to give credit to that person who is sharing that information with you. (School Librarian)

I know another thing that we try to teach is the ethical use of information. … If a kid gets information from a website, how do they cite that and how do they know that's an accurate website. When they go on Facebook, how do they lock down their Facebook page so that not everybody can see it? Plagiarism is a big thing and it's just so easy for kids to plagiarize. We spend a lot of time on what is plagiarism, what that means, and the different kinds of plagiarism. Our library provides equal unequal access to the opportunities, experiences, skills, and knowledge that will prepare youth for full participation in the digital world of today. (School Librarian)

The [school librarians] make a dedicated effort to make sure that the kids are creating their own work. They … are constantly making it a priority. I think that is one of the most important things

that they learn here: To recognize when something is not their own work and how to change that. (Principal)

A supervisor sees how information ethics can be reinforced in the classroom.

Students are also learning how to be responsible online [in the school library] - teaching students they're responsible for what appears on that screen and I think that can carry over into the classroom because [school librarians] are teaching them to make that distinction. (Language Arts Supervisor)

A classroom teacher reinforces this point.

I think in the world we live in there's plenty of information but it's a matter of how you look at it, how you go through it, and how you say this is valid, this is not. Those strategies are taught in the media center and obviously those are skills that are applied in the classroom. Again it's an extension to help us move forward in our instruction. (Fifth Grade Teacher)

A Social Studies teacher talks about how the school library develops responsible behavior.

[My class] was doing a project and making a video just a week ago. I said, '...We can get a video camera from the library and then you can edit there. They even have a Mac. [The students] were really excited ... they ended up doing their own videos. ... I think sometimes adults may not want to let go ... the technology is fragile, but at the same time the kids learn responsibility – not just how to use the technology, but how to take care of it so someone else can use it. (Social Studies Teacher)

The principal talks about information evaluation.

You know, it reminds me of somebody who says I really appreciate trees, but I never appreciate the forest ... You can go online and get information, but in the library [the school librarians] teach the whole gamut of information, like looking at the tree, and getting a piece of information, but [also] appreciating ... more global approach to solving things, and not just focusing on one database or one source of information. There is a lot of information that is not safe; [Students distinguish between] a good and bad website – that's what happens [in the school library.] They really are educated on how to gather information and what to do with it once they have it. (Principal)

The school librarian facilitates the finding of good information through her lessons using bogus websites.

> We're developing [instruction] ... *right from September, where we do the library orientation and* ... *getting online, understanding their databases, and doing an Internet evaluation. We do it in a fun way [using] ridiculous bogus websites, and the kids get a good laugh and it really [creates] a good point of view for the kids.* (School Librarian)

A classroom teacher illustrates how this was done through instruction:

> *I did a lesson last year [with bogus websites.] I put my bibliography on Wikipedia. If you Google my name it comes up. There are fifteen or sixteen [websites]* from the Chef's Association and *other things. So the kids always go to Wikipedia. I said,* ...'*I want you to read that.' They're reading it and they say,* '*This is* wrong!' ... *I [had] just added that line in Wikipedia. Needless to say [Wikipedia] slapped them in the face* ... because at that point they realized that you can't *trust everything on the websites. You should have seen their faces. They were saying,* but it's wrong! And I say I know it's wrong, with Wikipedia you can put anything you want there. When we do the reports, usually we'll work with one from Ebsco*host and one from WilsonWeb for the* bibliography and one book. So I'll say that for the bibli*ography you have to use different* *sources, so it forces them out and about instead of just grabbing stuff off the Internet, or just a* *book. They have to realize all the databases that are there. Four* years ago, I didn't know *anything about WilsonWeb* ... *[Databases] have helped me too. I use them on my own* .... (Teacher)

A science teacher considers how the school librarian models finding relevant information.

> [It's not] just good or bad information. It's w*hether the information is relevant to what you need.* And that's difficult too. *[The school librarian] models accessing the right information for the* *right task, but also models cooperative learning. {The school librarian] works with the teacher.* We're working together [on a national parks project] ... and we'll pull up something *from a* *database, and there might be 300 articles [that]* come up, and it's that discernment, knowing *what you need, and how to read an abstract,* and that's where *modeling comes in, where [the* *school librarian] models for students how you go about processing and finding exactly which* *[information] is going to be right for you.* (Science Teacher)

A history teacher wants his students to sort through information to find what is most useful.

One of the things I have been very happy with over the years is teaching students how to sort through information so I do a research paper and they come here and they show them different databases, but then they show them how to sort through which ones will be useful which ones aren't useful. How to discern quality? There is so much information now, finding stuff isn't the problem, but finding the right stuff is and that's what school librarians help students sort through. They help them how to sort through what is a good source what isn't and why. It's a pretty detailed lesson. (History Teacher)

The school librarian facilitates the finding of useful, relevant, and high quality information by guiding students to the databases best-suited to their assignments. She also helps them to use multidisciplinary databases with precision to locate the articles related to the discipline they are learning about.

From a science perspective, I find that I'm building on what [students] have already learned, and their [knowledge] is getting reinforced. They may have gone through the databases and learned how to use them for social studies, but even though they're the same databases, there are some tweaks and differences and things like that and [the school librarian] is wonderful with that. She spends time with students and goes through relevant databases for science. Because it might seems so different to the students, even though it's not, and then again helping them discern which resources will be the best for them, and which are [high] quality (Science Teacher)

Very clearly, students are socialized into the digital world as they are taught safe, ethical, and discerning criteria for making good judgments about the quality of information they find on the web. There is a pervasive consciousness in these schools that the availability of information on the web is not like the carefully selected resources in school libraries where explicit professional attention has been given to the selection of information with regard to age appropriateness, reading levels, accuracy, authority, and relevancy to state learning standards and school curriculum.

I would say having…I will be celebrating my 2nd year here in January and having worked in other districts I also think that our [school library] is unbelievable in terms of the resources, in terms of the materials that are here, in terms of the access that students have to electronic databases, to print materials, to computers. I think that this campus resembles in many ways a two year college or university. It has lots and lots of resources that our students have access to so that's definitely a strength. I think that our librarians are on top of the resources that our students need to stay

abreast of what the classroom teachers are trying to do. I think we're a very, very resource rich school. And I think that is not the norm for most public schools. (Curriculum Director)

In the digital environment information is unmediated: There is no application of criteria and the teachers and school librarians are aware of the need to develop information competencies in the context of good information which ensures good learning outcomes for students. In the context of good information skills can be efficiently, effectively, and explicitly. The presentation of quality information, instruction in finding relevant information, as well as safe and ethical behavior constitutes the teaching of digital literacy through school libraries.

Digital literacy is integrated with mainstream curriculum through the school library.

> *Basically, digital literacy is not an add-on here. It's infused [in instruction] through the school library where students can access] each content area of the school curriculum … [Digital literacy] is not a standalone; It's cohesive and fluent, and pretty well received by students and faculty.* (Principal)

Collaborative experiences for students are an important component of digital literacy.

> *But we do want our students to be able to connect and collaborate with others in our global society. I think [school librarians] really model this… through their teaching but also through their program.* (Curriculum Director)

A teacher describes how information is integrated with classroom teaching to teach digital literacy.

> *Discussion of what's happening in the world on a global scale compared to what we've done in a small town in New Jersey; Taking that idea and extrapolating it to what we've done on the Internet; Learning what is poor and quality info on the web; What we've done in discussions; What we've done by looking at the smart board; We do current events every week, integrating that information into discussions.* (Teacher)

Digital literacy using digital resources is developed concurrently with traditional literacy using traditional resources.

> *[Students] realize that they might be able to find things more easily using reading skills instead of just popping the question on Google. It opens them up to more resources, not just the computers.* (Sixth Grade Science/Math Teacher)

Digital literacy skills are life skills that prepare students for college and career.

> *What kids are learning here, especially in partnerships with _____ and with _____ is how to operate in the new developing Read Write Web world. … Whatever pushed them into the course. And they're writing research-based blogs but also interest-directed blogs on their topic. And they're learning how to access information, all that stuff, but now they're also learning how to present it to an audience [and] engage them. [They are] learning how to work with quality information without plagiarizing to encourage people to following along with their blogs, as well as to get on the net and find scholars and curators – other people they can communicate with, bounce ideas off of. And that's only going to help them once they leave here because of the written communication skills. Maybe if it's face-to-face communication skills – even how to compose an email. Kids don't know how to do that. Things like that are being taught. They're necessary skills. And I think right now it's kind of like background noise to a lot of people because we might automatically do it but we don't know that we're not doing it right. But I think that's going to put our students at an advantage when they operate next year at post-secondary or go out into the corporate world, to the world of academia or wherever they go.* (Social Studies Teacher)

A principal notes that digital literacy is "central and impacts everybody…"

> *… by getting [students] involved in the changes to prepare them for this century and the digital world … So that they have the skill set that they need. It's about process not product. [School librarians] jumped right on that, so they were willing to give up their [traditional role] and look at, 'What does our role need to be as we move forward to prepare our kids?' So because they have been in that discussion for at least the last two years, I think we've benefited greatly. Greatly.* (Principal)

A teacher gives examples of how the school librarian teaches digital literacy.

[The school librarian] offers suggestions, dove-tailing with what teachers want to do. She gives a lesson about why it's not good for students to use Google [exclusively] and shows them benefits of using resources that she paid for out of her budget and explains to them about plagiarism - how to eliminate that, why that's so important, about intellectual property – things like that. I think that made an impression on them – especially the 8th graders – I think they got the concept that you can steal someone's iPhone, but you can also steal someone's ideas – And [the school librarian] gave them background on recent cases – something familiar from recent current event stories that we had done. (English Teacher)

Technological tools help school librarians to teach digital literacy.

I wanted to pick up on the plagiarism. In coming here to learn research skills, we also learned what plagiarism is and we learned how to use NoodleBib … to make citations. [The school librarian] has helped me to aid my students. She gave a class … that we co-taught. That was very important and it was a wonderful experience where we intersected. She would give bits of her information that she was very knowledgeable of, and I would jump in at certain moments when I had information my students needed. I knew my students well so I could guide her with them … When we co-taught it was a very rich experience because we were combining expertise. (Teacher)

Evaluating multimedia resources is an important part of being digitally literate.

If [students] see [something] in writing, they're just happy to take it and put it into a paper. One thing that has been helpful to me is [the school librarians'] work with … how to figure out if sources are credible - not only written sources but also … digital - whether or not photographs are licensed or unlicensed, and how to find unlicensed pictures that would be appropriate. (English Teacher)

Promoting Traditional Literacy in the School Library

I just want to add that on my way in I saw a student who is a known discipline problem, sitting in a chair reading a BMX magazine. While I was on my way to this meeting that student found a place to come and relax and read this magazine. (English Teacher)

While digital citizenship was a predominant focus of the role and value of school libraries in today's schools, participants identified a range of other capabilities that, through the school library, school libraries equip students to live and work in a rich information environment.

The school library not only is responsible for teaching information literacy and transliteracies, it is, and always has been, a major contributor to developing and supporting literacy in the traditional sense. The literacy function of the school library has several dimensions for students from kindergarten through grade 12 that range from learning to read for young children to reading to learn for older readers. These dimensions include: Reading motivation; reading engagement; reading fluency; reading comprehension; sustained reading; strategic reading; reading for pleasure; and reading remediation. A vast body of research literature over many decades has established the school library's connection with reading and literacy development. Key findings enable a range of claims to be made that include:

- Better school libraries result in more reading;
- The more hours a library is open, the more is reading done by students;
- More planned trips to the library by teachers and their classes result in more reading;
- The physical environment of the school library contributes to how much reading is done;
- The more money invested in school library, the higher scores on standardized tests;
- The higher the quality of the library staff, the better the achievement of students, and;
- Unlimited check-outs and book displays result in more reading.

Phase 1 of the NJASL study indicated that school librarians in New Jersey make an extensive and diverse contribution to reading and related activities in the school. The top 10 reading and related activities documented were:

1. Literature displays.
2. Book talks to promote literature for recreational reading.
3. Free voluntary reading in and outside of school.
4. Databases and/or websites encourage reading.
5. Reading incentive programs within the school.
6. Book talks to promote recreational reading.
7. Sustained silent reading programs such as DEAR, inside of school.
8. Self-help information such as brochures, web links, or book lists.
9. Books or information to help students cope with challenges or sensitive topics.
10. Summer reading programs. (Phase 1 report, pages 168-173)

In this study, participants unequivocally asserted the importance and value of the school library in nurturing reading and ongoing literacy development, and providing the connections to diverse literature and informational materials that build capacity to want to read. Access to diverse, quality reading materials is viewed as the essential component framework for nurturing and sustaining students as active readers. Participants acknowledge that sustained reading is particularly developed with the presence of a school librarian to guide the choice and to encourage motivation and enjoyment of reading, and to foster meaningful reading across diverse media; and to support the development of reading for understanding in digital environments. The school libraries take the lead in organizing and promoting reading events and reading programs across the school.

It is critical that students have access to reading materials because their reading improves by reading, along with their spelling, grammar, and writing (Krashen, 2004).

> *The media center has really become a very centralized focus for literacy development.* (Principal)

> *The students really see that reading…they're learning to read and then they're reading to learn and reading to learn is very important and it's promoted here at our school and the students know that.* (Principal)

The school principal is clearly aware of how reading and literacy development is enabled, particularly the "reading to learn" connection, and the reading for understanding connection:

> *For example, [the librarians] work in conjunction with the teachers and the students and the community through a reading incentive program. And students see that it's not just about reading for quantity but reading for quality. And knowing that the comprehension piece is really important that even though you might be able to decode, if you don't understand what you're reading, you're really going nowhere. So that reading incentive program really has that comprehension piece built into it so the students know it's not just about decoding a big book and not knowing what it's about.* (Principal)

This view is supported by classroom teachers.

> *Any free period [some students] are [in the school library.] It's that love of reading. I see one of my freshmen checking out two, three books. She says, 'I want to read this one. I want to read that one.' I think it's because we have books [students] are interested in reading. They're learning to love to read and that's capturing their attention and I think that will carry them through wherever they go.* (Social Studies Teacher)

The reading advisory role of the school librarians is recognized.

Having [the school librarians] kind of like their reading advisors has been an amazing experience. I watched them choose book and some of them they lost interest and you know there are doing a writing assignment. The second marking period they came back and both of the librarians helped them choose books and they ask questions like, 'What kind of movies do you like? Is there a kind of book that you've liked in the past? What do you do in your spare time?' [They are] helping them to find a book they may end up loving. And reading the first assignment they handed in, it's a big difference between the first marking period and the second with them having that guidance. I read the books that they read in the first marking period and you know I could tell where they were reading and where they weren't. (English Coordinator)

The school librarian involves teachers in reading initiative.

I think we talked a lot about research and information skills but the other thing I think the library helps students with is everything that goes along with reading because the other role of the library is promotion of reading. And I do - we do in this school "The Battle of the Books" – and actually we have teams of teachers who participate with me. We are collaboratively promoting reading. We are all doing this reading. (School Librarian)

The school librarians promote a culture of literacy in the school.

I just think it's so great that our media specialists are really tuned into what the students are reading right now, the new books coming out, so it helps to cultivate this love of literacy – a culture of literacy that is going on in this school. And you can see circulation is up in the past couple of years, I was amazed when I looked at the numbers .... I'm just thrilled they're excited to be reading something, and I'm always discussing, 'What are you reading now?' I have students who have a different book every week, and they talk about it with each other. They're excited to share what they are reading and they pass these books along. (Supervisor of English)

Teachers see a connection between what they read to young students in the classroom and what the students want to check out of the library.

I know in my classroom, if I read a book in my classroom that's on a certain topic and they enjoy it, they will come back and they will ask [the school librarian] for books like that. And they're so excited when they come. "I found this book!" We love that because then we know that they are

loving learning and loving reading, and that [the school library] is a positive place for developing reading. (Third Grade Teacher)

A Special Education teacher notes that the school librarian is a resource for supporting individual students' reading interests.

[The school library has a] display of books and a program for students who are readers. Every other month, I end up sending someone down to [the school librarian] who lets them know they liked a book they saw on the shelf, or they really like this book, or this was the first book they ever read, or [they ask] to read more books. (Special Education Teacher)

At the school library, a love of reading and a love of language is reinforced.

Another things that [school librarians] do is … reinforce this love of reading. They have a coffee open house in the spring which is a really fun day. It's not just a day when the kids can come and goof around. It is all centered on a love of language. They have fun book talks which help the kids to search for books they are interested in. They have fun games for learning how to find books around the library … They have reading role models. They have contests. They just make it such a fun place. They make it the heart of the school. (English Teacher)

School librarians create a spark or appetite for reading.

I think for one, in some of the students they help to create that spark, that insatiable appetite, that love of reading [by] helping them to choose a book that they like … It's [like] a waterfall: It has a rippling effect. Staying on top of their reading, knowing what books we have or constantly bringing in new books inspires kids to want to read. (English Teacher)

Book talks stimulate students' interest in choosing books to read that they will enjoy.

I think for me what I see, and I'm a little old-fashioned in this respect, are kids just actually reading. And I love to see that our librarians, even at this high school level, still do basic book talks. They will visit classrooms or the kids will come [to the library]. But I have to tell you when I see kids coming in and out, most of them are putting their books on the counter so they can go through. They are leaving with books and they are reading books - books that they just enjoy, not books that are assigned to them. I don't know what the numbers are, but I have to say that I see kids reading for fun, for pleasure, a lot and I think that is what I want for any child. (Curriculum Director)

The school librarian helps students learn to love to read.

> *You think that by high school that love of reading is going to taper off. And I just can't tell you, as a librarian and as an educator, how fulfilling it is to have kids actually learn to love reading. They say, 'No, _____, don't stop reading that excerpt from the book. Read us some more.' At this age [they] actually love and value reading because those literacy skills apply to every aspect of their lives.* (School Librarian)

School libraries are not just places that build a sustained reading mindset. Reading flows into career choices and the writing process.

> *We go over our magazines and periodicals at the end of every school year. [The school librarian] really increased the list to try to help out. We do get specific culinary literature that is current, up-to-date. We get that pretty much for all of our career areas. That's something that she's really worked with. And as far as getting into the writer's mindset, she's also developed a relationship with a local writer … in New York City, where she's actually brought her in to speak with the kids and go through the writing process.* (School Principal)

The school library supports the conventions of citation and writing a formal paper.

> *You know, MLA formatting all of those things that go along with presenting information and formal writing, all of that is done through the media center.* (English Teacher)

The school library helps to make the reading-writing connection.

> *This marking period [students] are giving so much more detail in their writing. They are even improving their writing because they've really bought into what they are reading now.* (English Coordinator)

Students learn about intellectual freedom from the school library when they learn to appreciate access to information as a human right.

> *One of the most important things is that the students learn that it's their right to have access to information. Our librarians are really specific in letting our students know that they want to provide access to whatever types of materials the students want. So there is a lot of education about banned books and students questioning why they may or may not be banned, but at the same time coming to terms with the fact that our librarians want them to be able to put their*

hands on whatever they want to in terms of what they [want] read. It's their right to read.
(English Coordinator)

The school library helps teachers develop students' writing and their ability to find digital materials.

...In my class I had [students] write science abstracts ... to work on their writing skills and to see that what they are leaning and what is happening in their world. Their writing is improving. A lot of the kids ... they don't get hard copies of magazines so one of the skills that they learn is where do find this information. 'Where do I find online articles, journal articles?' Our media specialists show them exactly how to do that. (Science Teacher)

Participants in the study identified a range of outcomes from the sustained focus of the school library on reading and literacy development. In addition to developing a love for and interest in reading, these include student achievement, test scores, vocabulary development, and fostering interactions around reading. These outcomes are the result of supporting emerging literacy development for older elementary students and adolescents after they learn to decode and read. Without this support and deep and sustained reading, comprehension does not develop on its own.

... We teach kids how to read, but {they have to want] to come to pick up a book... I will tell you probably over a third of our students walk through these doors every day. I don't how that impacts student achievement, but it's impacting it pretty good. (Principal)

A school librarian knows the research that tells us reading improves vocabulary. A consistent and organized focus on reading improves vocabulary related to the knowledge that students gain from reading.

{The more they read, the more] students' vocabulary is expanded as their general knowledge is broadened. Those things are not to be overlooked. (School Librarian)

Students expand their vocabulary by discovering new search terms while searching for information.

Vocabulary development is an important outcome. As [students] are looking for specific information that the teacher has directed them to ... the information that they need to find, they are broadening their vocabulary because the of the search terms that they [learn to use]....initially [the terms] are not the search terms [the ones] used by adults who are writing in that subject. And so we get to explore, when they're doing research projects, what other words they could use to find information. We look at synonyms, that kind of thing. So there's the vocabulary [development] as well. (School Librarian)

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Reading does improve test score because reading is learning.

> *Reading does help improve test scores.* (School Librarian)

The school library helps to develop students' reading dispositions and preferences.

> *[The school librarian points students] in the right direction. They start to learn the author's style, what they like, things they've never thought about before.* (Special Education Teacher)

The school library helps student find "the right book" and gives several teachers access to educational materials that they could not afford to buy from their budgets.

> *Oh, [students will] ask you, 'Have you read this book?' or they'll see you with a book and say, 'Oh, I wanna get that book'. [The school library] helps us interact with the students on a different level. …. not only can the kids request what they want to see in the library, but we can as well. And that's very helpful because our budgets are limited everywhere so sometimes we try to tap all of the resources we can. I know if I can't purchase a particular documentary that I want use for my classroom then it's [in the school library] and it's used by everyone in the building that wants to use it.* (Social Studies Teacher)

The reading culture enabled through the school library in one school has become a key mechanism for community involvement, and demonstrates to the wider community this school's commitment to improving reading and literacy. The school principal outlines a reading incentive program that illustrates how schools with collaborative cultures reach out to their communities to become a part of the life of the school.

> *I think we would be remiss if we didn't include a comment about how [the school librarian] gets community involvement here at our school. One of the important things that happens [in the school library,] when the children come in on regular basis, is the guided selection of resources. [The school librarian] is able to do that with the children. She walks around with them and helps them pick books so they can find a just right book: A book that is of high interest to them and a book that is at appropriate reading level for them. That guided selection is very important. And why she is able to do that is because she has a large group of parents who are willing to come in and assist her. So the parents will check the students out while [the school librarian] is doing the guided selection with the children. And community involvement, research shows, is one of the school level factors that has a great impact on student achievement. So we see that in action here at school. In addition, the PTA will hold the book fair in [the school library] which we do twice a*

year, which is a big event. If you could come here in the evening, one evening per week, we have [the school library] open. And it's just mobbed in here with kids and parents clamoring to buy books. So this is a place where the community can come. They know that they're welcome here - that they're valued here and that they are part of the implementation of all the things that we do here in the library. [The school librarian] has a new parent tea in conjunction with the PTA that sets the groundwork for [parents] feeling welcome here. At the end of the year she has a luncheon to thank the parents for coming in to help. So the components of involving parents and the community are important here. She even has couple of parents and community members who come in to help her on a regular basis. They're not paid. They're just volunteers. They come in to help the library be a better place. (Principal)

Social and Affective Learning from Information through Inquiry in the School Library

Building self-esteem, - [the school library]encourages kids and helps them build self-esteem. (Teacher)

The social and affective learning that happens in school libraries is difficult to treat as two separate outcomes. Learning in the digital environment is often social, as is learning in the school library. However, there are emotional dimensions to social learning that are directly derived from the nature of digital environments.

The school librarian teaches communication skills that are part of doing and presenting research.

> *She really promotes [students'] acquisition of research skills and technology and communication skills. And one of our learner profile attributes is that students be good communicators and do research well [using] technology. And then if you're able to communicate in various ways, you're really ahead of the pack - you're on the road to being a lifelong learner.* (Principal)

Cooperative team work in the school library helps students how to learn to learn from each other.

> *I see that [students] are learning to work together [in the school library] as a team and they're learning each other's strengths. [We] have one laptop set up for three children so they're \working as a team. They're supposed to be a team going into [outer] space, and they make badges and so forth. They support each other; they support each other's learning. Somebody is in charge of the laptop, somebody does the writing. So there's a lot of social skills and teamwork that's built into that system as well.* (Third Grade Teacher)

{Students] are leaving the library with [the experience of working] with each other, doing long-term projects in a group. As much as that can happen during the day is great because it can't always happen upstairs. I feel like maybe we're doing less of that in the classroom because of the nature of our curriculum. But for [the school librarian] to give students that opportunity, that's huge. (Fifth Grade Teacher)

The participants identified a range of affective behaviors and dispositions that are nurtured through the school library: Social learning, emotional development, and developing social and interpersonal skills that are important for living and working outside of school.

I don't know if this is by [the school librarian's] design, but Vygotksy would have been very happy. [School librarians] really understand that social learning is where deep learning happens. Creating that environment [is]... like watching how easy it is for the ballerina to go across the stage, then you try it – and you realize how difficult it is ... (Supervisor of Instruction)

A teacher observes that the school library encourages students by building competencies.

I think that having the media center…is confidence building. (Fifth Grade Teacher)

School librarians develop students' good behavior and social skills.

Beyond the information and technology, another thing that [school librarians] don't get credit for is [good] behavior and social skills. Most of our classes are organized at certain levels, and some kids aren't in classes with certain other kids. In here it's everyone, it's every level, every class, every grade, and they all have to work together. They have to coexist and hopefully appreciate, not just tolerate each other, and respect the building and the equipment so that the rights that they have here are preserved going forward. All of that comes along with the experience that they have [in the school library] ... (English Teacher)

The school library promotes sharing.

I think that not everything is directed around research – you have the social learning: A kid finding a magazine and sharing it with another kid, [for example]. I don't know if it's going on right now at this time of year, but I remember at end of last year there was a group of students very involved in hunting down every piece of love poetry they could possibly find and sharing it

with each other, with the assistance of the adults here to pursue avocations – interests and hobbies. [The school librarian's] craft club – is an important piece. (Supervisor of Instruction)

School librarians develop empathy in students through their teaching.

Going back to the social skills, like empathizing for [students] to understand how you would feel if someone might plagiarize something you have created. I think many times they get the ABCs of why you shouldn't do it: This is how [students] can get in trouble. But I know in [the school librarian's] lesson you kind of flip the tables. You start with music, which they don't expect and use that as an example. It helps them to relate to something they may have created and how they may feel if someone were to misuse what they created. (English Teacher)

The school library teaches personal management skills as well as social skills in learning contexts.

There are those personal management skills I guess that they learn as well that I don't think about as being something that you can look at as a learning outcome, but you're right – I do see that after school when they're alone that they learn. There are interpersonal skills the kids learn when I work with teachers who bring their classes in, because often they'll be working in groups or they're learning a new skill and they're helping whomever is sitting near them. Sort of like we all do in workshops when something is a little bit stressful, - we help each other along and students do that kind of thing. They're learning how to work with each other and support each other, and how to ask questions and get the help that they need and how to share. (School Librarian)

The school principal elaborates on social learning online.

[The supervisor of Instruction] talked about social learning. I think the implications of the relationship that [the school librarians] have built [with teachers] – is significant. If you look at something like Diigo and just the way that it's taken hold in _____'s classroom, obviously you're teaching kids about social bookmarking, but Diigo is built on this social learning premise: The idea of social networking. People turn to sites like YouTube or Diigo to find answers to questions. It's not just these large search engines anymore, and that scholarship is sort of this collective enterprise. So … kids are building a network for how answers can be found. (Principal)

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School libraries are important agencies of socialization, contributing to the development of social and collaborative skills. These include: Learning as a social activity and learning as a knowledge space;

Learning is a social activity, and conversation is a critical shared activity to foster learning. Contrary to the notion of school libraries as quiet silent places and the stereotypical shushing image of school librarians is the fairly new conceptualization of the school library as a place of conversation.

> *The kids feel welcome when they come in. It's not a place that they're afraid of, opening their mouths and saying something - Making too much noise. That's why so it's so accessible to the kids. They enjoy going there.* (English Teacher)

The school library is a place for conversation that results in learning.

> *If I could just add that when I bring my kids in for the research paper [the school librarian] has a packet ready for the kids and then she'll even go further than that and do modifications on it, which benefit the Special Ed kids. And it works for them. It's tremendously helpful because we need to teach them that skill of how to do their note cards, how to do their source cards. It's tremendously helpful that she's always working on modifications for the kids. This involves lots of conversations – the library is not quiet, and we would not want it any other way.* (Teacher)

The school library is where students learn social skills specific to a place of learning.

> *The library model over the years is [no longer] the quiet hush-hush it used to be because it's a much livelier kind of place, but I think that [students] are also learning some of those social skills about how to behave in a library and the types of voice and action and learning conversations that are appropriate to a library environment.* (Third Grade Teacher)

The principal sees the library as opportunity teaching born of these conversations.

> *[When the school librarians] are having those conversations, it's opportunity teaching -- [that] is what's going on. It's the willingness to say no one is really going to say anything if I stay behind my desk but I'm going to come out and take an interest in what*

that person is doing. The anime club that the media specialist does is a volunteer club. She does it because there was a need in our school for kids who wanted to do anime and she knew that because she talked to kids. That informal, every day communication, you can't measure. It happens 13 periods a day, every day, tirelessly. And that's hard because we are all human beings and yet [school librarians] always find opportunities to do those things. (Principal)

The library presents an environment conducive to interaction and learning.

The one thing that I've noticed here is that it's always a very busy place, and it's not totally quiet. There are conversations that go on, but it's quiet enough to work. There's a lot of interaction that goes on with students and a lot of conversation. It's an active place to be, where before, I've been here twenty-three years, you would come in, and the librarian was very adept too, but I believe it was the design of the room. The students were just sitting in those little carrels, and either had their heads down and falling asleep, or were just very quiet, not interacting. This whole design where [the school library] was opened up really was to the students' advantage. (Teacher)

School librarians create spaces that are conducive to formal and informal conversations so that the library is not a barrier to conversation. They have embraced the library as place for talking and developing relationships that support teaching and learning.

The library is also a knowledge space. With emphasis of these school libraries on inquiry, thinking, reflecting and communicating, the school library is positioned as a knowledge space, rather than an information place. This shift is timely, particularly when the educational landscape in New Jersey is calling for students to be creators and producers of knowledge rather than receivers of information:

[The school] library helps promote or create – it's a space for students where they can find knowledge … So it represents that space, it represents that thirst for knowledge – where students can go if they want more …. I think not only physically is it that space, but also psychologically representing that to them, because our job is also to create a thirst of knowledge. I just always remember going to the library as a space where I could find out – look in books and find out more – creating that desire is something library does. So physically [and psychologically] it represents that. Having that space for

[students] is important for them, to go there, and to know that's there, and that someone will guide them through and point them in the direction they need to go because sometimes we know we need to find things out but we don't know how. (Teacher)

Teachers and the school librarian bring the wider community into the school through the relationships they build with parents.

[The teacher] had a nice bunch of parents who wanted to come and make a donation in her name and so we were able to get some great mystery books. We were excited to see that – we like to have a strong community focus. (School Librarian)

The school librarian has active base group of parents that help out from time to time. (Teacher)

Building the library collection is a community effort.

[The principal] mentioned parental involvement and I think we do have a strong involvement by parents and the community … [The school librarian] has people to help her shelve the books and check them out, and also, [the parents] have been good at building up the library collection in terms of donations of used or purchased books. [The school librarian] always got a wish list going and parents are always very generous in helping out. Parents see it as their community too and that builds ties. (Teacher)

The school library reaches beyond the local community across state and national borders.

The school librarian offered a website and … sent an email about pen pals to the community. We talked about reaching out even more globally … to let [students] network with students from other countries or another state. (Teacher)

The principal sees the school library as a place for the community come and feel empowered by education.

If our children don't realize the use of libraries, they will disappear. … this is a place where the community can come, like the bilingual programs on Saturdays, or the after school programs. If the library was the hub of every town or every school maybe we would also shift the workforce in our town and … that [would have a] rippling out effect where the community feels more empowered by education, as opposed to complaining. (Principal)

The school library is seen as a mechanism for equity of access to information across the local community.

> *And you could level the playing field. If the library is open kids have access to information, the community has access to find what they can't readily get anywhere else, especially when there are receptive people working in the library, and that helps even more because the information is coming for free.* (Special Education Teacher)

The school librarian is seen as a guiding teacher.

> *… Libraries need guiding teachers, so that's what makes it work here. (Supervisor of Instruction, FGMT, P. 129, 120)*

The School Library as Surrogate Home

It is important that [students] know that they are in an environment that's safe. I think our library is that place. It's a comfortable place. The kids love to be there and they feel comfortable therefore they are in an environment where they can learn. (Science Teacher)

The school library is a surrogate home. The notion of the library as a surrogate home emerged strongly in the discussions. The school library provides access to resources, technology, and information and instructional services that are not available in the homes of the school community. The provision of a school library provides access often not available in homes. It puts in the hands of students a range of resources, technology, reading materials that may not be available in home. Many principals pointed out that communities surrounding their schools are not wealthy. Indeed, some are very poor, and the presence of a school library serves as an information environment for all, regardless of economic circumstances. The school libraries were perceived to be a community equity dimension. This did not just apply to access to information resources; It also applied to having space available for students to engage with information and to give them the appropriate support for their learning.

The school library is a symbol of the school's academic mission, offering all students a dedicated space for studying.

> *We tend to make the assumption that students are going to go home … and have a quiet place to work, and that parents will be supportive of their academic pursuits. … Some of our students … don't have that advantage at home. I think it's very important in a school to have a space that's academically oriented, that is quiet, that is positive, and that is expressly for the purpose of furthering a project and studying before or after school. Sometimes people are disadvantaged*

and don't have that, and if you don't have it at school, and you don't have it at home, where are you going to get it? (Teacher)

The school library may be the only space where students can come to work with each other and benefit from the services of the school librarian.

> *This may be the only place … where [students] can have space and work, where they can access the Internet . .. The longer this place stays open, the more we stay open, the more this appears as an attractive alternative [where students] can come, sit down with experts, learn with people, accomplish tasks – and that's also what this space is about.* (Teacher)

Access to the school library in the morning before classes starts focuses the students for the day.

> *Before school is the [students'] only time to pursue independent research or catch up with other assignments. Not everybody has Internet access at home so they can come here and complete assignments ... or they might just come and ask [the school librarian] questions. They come in and read the newspaper in the morning. They come in and meet their friends.* (School Librarian)

Students have access to the supplies and equipment they need to do the kind of school work that characterizes a 21ˢᵗ century education.

> *You have so many students who either don't have Internet access at home, don't have a printer or access to the programs they need, or may need Microsoft Word. They come [to the school library] and do all of their work, print it out, do whatever they need to do ... We also keep a large amount of supplies here for them: construction paper, markers, crayons, scissors. They are missing right now (laughter). We do try to make sure that what they need to get the project done is going to be available to them. There are also scanners, and they can burn DVDs or CDs if they need to. We also have a video resource center where they do a video project and we have a high definition video camera where they can their project and the editing software is here on a Mac or PC.* (School Librarian)

And from a different perspective, making the school library resemble a home has paid dividends.

> *A few years ago [the school librarians] decided to [allow students to] have their lunch [in the library] (whispers,'That's nice') so we have three lunch periods, fourth, fifth and sixth, and it*

allows students, especially the freshmen, to come [to the library] to meet friends. It's not as threatening as this huge cafeteria, so that's been nice. Plus they can work on their academics *and their assignments, which is not really possible in the cafeteria.* (School Librarian)

The school library offers the comfort of a home to children from a poor community.

This is a very poor community in a lot of ways and the home is not the center of a lot of these students' lives, I would like to see gas fires in that fireplace. *[The school library is] where they can come in and feel the center of a home. (School Librarian)*

The notion of the school library as a safe place was identified in all of the focus groups. "Safe" was interpreted from a range of perspectives: A place where students can engage with information knowing that they can get individual guidance; a place where they can explore diverse topics, even controversial topics, in privacy and without interruption; a place where they know information they access is trustworthy; a place where they can retreat and work without interruption and intervention by other students without any kind of threat; a place where they can obtain individual mentoring as needed without any kind of judgment.

[The school library] is a safe environment for our students as well. They know that not only do they have access, but they're getting it in a way they can trust. They trust the *teachers, they trust [the school librarian] who has access to so much.* If they are home, *they have the same internet at home, and the school library at home, which is a* wonderful infrastructure we have here … Online databases have so much to offer. *They're getting –* I don't want to say supervision, because it's not necessarily that kind of *role.* It's more of a mentoring [role]. … *[Students] are able to [get] access in a safe* *environment. And also [the school librarian] is wonderful at telling them the difference* between a good website, and one that isn't so good, which is really important these days. (Science Teacher)

The morning program in the school library provides a safe place for students at the beginning of the day.

I observed that there were a few students who had trouble sitting with other students in *the cafeteria or the gym. So I opened my [library in the morning] to those students* *because I wanted it to be their safe haven. I wanted them to know that it was an open* *space for them to come and actually not feel threatened.* So that's how my morning

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program began and now it's actually exploded and I have an average of about 70 students. I wanted it to be a place where they feel comfortable, where they can be themselves, and they can explore whether, even if it's sitting on the floor reading. (School Librarian)

The school library is also a safe place for teachers.

> *But it's also a safe haven for [teachers]. It's a place where it doesn't matter what group you are in and it's also a very very nurturing place. (Someone whispered, 'Absolutely!')* (Principal)

The school library is a place where you can get help.

> *It's like a safe haven, a place that fosters learning. You can come here and get help for whatever you need.* (Special Education Teacher)

The after school hours of the school library provide a place for students who have no place to go.

> *We were saying it's a safe haven and it is. Sometimes kids just come here because they have no place to go after school. They want to come here and learn some things, get some homework done, and they feel comfortable here.* (Math/Computer Teacher)

The school library provides a safe environment for students who do not feel part of the school community.

> *Our library really promotes a love of reading, of learning and it also allows students to feel very safe. And I think that that is important because I know that a lot of students come here who don't necessarily fare well in the social world and the media specialists have gone out of their way to really find a place for them and to reach out to those kids who might otherwise be quite lonely and make them feel both welcome and safe. I don't know if I could speak strongly enough about the importance of that in a school system where there are kids that don't quite fit in and don't know where to go and can come here and find a safe harbor. I think that is incredibly important.* (English Department Supervisor)

The school librarian recognizes the importance of educating the whole child.

> *I'm so glad to hear so many people talk about safety. When I think about how the school library contributes to learning ... the first thing I wrote was how to motivate students,*

care for them ... so they are able to learn, and I think we can require all the resources that are available. If you are not in a place yourself where you can learn or you can where you are safe ... and motivated ... it doesn't matter how many resources you provide. This is not a rich school dollar-wise, but it is a rich school in a lot of other ways. (School Librarian)

A principal clarifies the meaning of 'safe.'

I want to make sure that I clarify 'safe.' I mean any place in this building you could come and you're safe. I want to make sure we clarify "safe" because there are a lot of things information-wise that are not safe, and that's where I appreciate [the distinction between] a good or a bad website, and that happens here. [The students] are educated on how to gather information and what to do with it once they have it – how to determine if it's good or bad information. That's one of the things you learn. (Principal]

Testing for students with special is accommodated in the library.

The way the library is set up makes it a learning environment. We also utilize the library for testing with students – it's a safe haven. We can do testing for them down here. They can do it on the computer, or they can do it right here at the table. If we didn't have the library we wouldn't be able to give the modifications that we need for some of the students who are learning disabled or need additional time or all of those things because a lot of the classrooms are used during the day. (Special Education Teacher)

Assessment of Student Learning in the School Library

The kids like to come school [but if] we are going to teach them how to read they have to want to come and pick up a book ... probably over a third of our students walk through these doors [of the school library] every day. I don't how that impacts student achievement, but it's impacting [them] ... (Principal)

There is a considerable body of research which has sought to establish the school library's impact on student achievement as measured by standardized test scores. Surprisingly, this kind of assessment did not emerge as a strong theme in the focus groups. They did, however, talk about the difficulty in measuring the impact of the school libraries on learning, and the local evidence of grade improvement and the quality of student learning outcomes, or their work.

Evidence of the Impact of the School Library on Student Learning

I've seen a very positive impact on the grades students get for their research, and they learn skills of information analysis and thinking that improve their test scores. (Science Teacher)

A principal made the connection between good state test scores and the learning that takes place in the school library.

> *I have to say that traditionally our scores have always been fairly good and I'd also like to think that because of the interaction that takes place in the media center, we've maintained, if not improved some of those. But I don't have any real baseline measurements to say to you that with a lot of accuracy … It's just the idea that our students are comfortable coming in here and socializing to an extent, and then also learning a whole lot about technology. All of those aspects feed in to a well-rounded student, and that our students achieve for that reason.* (Principal)

Another principal sees a cause and effect relationship between improved test scores and the students' positive attitude toward learning in the school library.

> *When [students] come [to the school library] their time is productive. When they come here for lunch, that's 20 more minutes of educational time, or when they open it after school. Those are the things, when you are looking to define a school library. It improves our student's standardized test scores and student achievement. You want me to tell you how? It's because our kids like being here. I couldn't give you that exact answer but it doesn't have to do with there being books in the media center. It has to be… that the kids like it.* (Principal)

Another principal acknowledged that the impact of the school library is a difficult thing to measure, but these comments were overshadowed by what participants saw as more significant, timely and lasting impacts.

> *You asked three questions so far and those three questions really come down to the willingness of the media center teachers, or librarians, to embrace their role in school culture. Whether it be a positive or negative one, how much they can impact it without being able to measure it, because in this world of instant gratification, give me results now. Well, I know that [school librarians] are a huge part of test results. And we see them continuing to rise, but if you said define it, I can only define it as kids love coming to our school and [the school library] is one of those components. So when you look at that role, it's the librarians embracing the culture. Are they given the tools to be able to*

embrace their role? We're not putting restraints on them ... [the school library] impacts everybody who comes in. I think that's a great summary of what happens in this media center every single day. (Principal)

A teacher notes the connection between students work in the school library and student motivation to improve their grades. *Also my students have learned what questions to ask, how to get their reports from a C up to an A...* (Teacher)

Another teacher attributes a team teaching in the library approach to better grades.

Yes, the grades have gone up, and the kids understand now, the kids understand that it's a team and that there are people they can go to. My big thing is if I'm in there by myself and I've got 25 kids, how do I help 25 kids in one 42 minute class period? But when you have someone else who's on the exact same page that you are. The kids get so much more assistance and personal attention. Their grades can't help but go up, and their learning goes up along with their grades, which is the key thing. (Teacher)

The school library offers an environment conducive to learning.

One of my personal philosophies at the middle school level is that I want kids to enter our library building and I want them to achieve well [and] for the environment to be exciting. There are things that occur outside and things that occur inside our building that can help foster that. And when you have excitement and enjoyment and fun and learning in the library you see the success in the classroom with grades and tests. (Principal)

The resources in the school library stimulate positive dispositions to learning.

I'll give you a result from the availability of books in the library that they would not normally encounter. One of my cherubs has got a PhD in physics - he's at MIT. He may have never gone into physics without the availability of these materials. (Teacher)

This teacher sees the school librarian as the operative factor in the positive impact of the library on student achievement. *It's just a room without the media specialist to guide us through those resources - to let us know what resources are available, how to use them in a classroom to impact student instruction, and improve their grades.* (Teacher)

Perhaps the strongest evidence of the impact of the school library on student learning is the quality of students' learning outcomes, which constitute primary evidence of student learning

while summative test scores constitute secondary evidence that is farther removed from the learning..

> *The evidence of this over the past couple of years, the best evidence I can give you for student learning, is the quality of their papers and their presentations. Now we have a mandated paper on the sophomore and junior level and the quality of those papers and those presentations since [the school librarians] have been here has been phenomenal. So I think that's the key evidence that I can point to that all of this works.* (Social Studies Teacher)

There was considerable discussion of the longer-term impacts of the school library in terms of learning outcomes such as navigating the digital landscape, college and career skills, digital citizenship, and ethical information behaviors. These center on the development of a range of capabilities and dispositions that can last a life time and have salience beyond schooling, and not merely school-based achievement.

As one principal explained:

> *The learning that goes on here is not about how to do school. It's how to learn and the value of learning. So I think that because there is a culture in this part of our district and our buildings, here it's about learning: Learning for the sake of learning; Empowering students to control their own learning and to be responsible for it;   To know how to go about doing it -How to figure out 'how to figure out;'   Giving them those 21st century skills that they're going to need to move forward; It's about empowering them with a skill set and understanding the importance of doing what they're doing and why they're doing; Well, you've just got to do this research paper so you need to know how to do it.' That's not what goes on here. The reasons that kids hang out here more often than in some of the other districts I've been in is because there's a real commitment to learning here. It's not about learning how to do school it's about learning how to learn.* (Principal)

According to the participants in this study, independent learning is seen as an approach to learning where learners invest time and effort into mastering a range of capabilities to become self-sufficient, able to apply a range of skills to act autonomously and with self-direction. They develop self-efficacy, or the belief that they can learn independently, and in so doing they exhibit

responsibility for their own learning. These benefits derive from the explicit help and instruction they have received in a learning environment that is supportive and encouraging.

> *I think some of the things that may be more than a specific academic learning outcome, a general outcome of being more self-sufficient, of being independent learners, those kinds of things are a large part of what we're talking about too with what we see in the students. Feeling self-confident that they can go in and have someone help them, but also that they have learned how to do things independently. I think both of these things are very important to develop: Their sense of independence and responsibility for their own learning and moving forward for life-long learning, but also the democratic prospect of having them work together, which I think this library [does]beautifully.* (Teacher)

A history teacher elaborates on the help students get in the school library.

> *I think the independence is very important. It fosters independence that carries over because they can come here; they are welcome to come here. It's friendly, as long as they sort of have a reason to be here. I think living in a world where we have so much information available - more information then we can handle, it's almost dehumanizing… It's harder in a strange way to ask how to look [for information] and I think that's what a library now does. At home … you don't necessarily have someone to show you how to look. {In the school library) there is someone you can ask who is not a teacher [who] grades you, not evaluating, just helping you learn how and where to look. You don't need this physical space for the information, but you need an environment with a person or persons to create that culture and develop that independent learning orientation and be set up for life in this kind of world.* (History Teacher)

A principal sums it up:

> *Through the library, [students] have developed many skills of being independent learners capable of going out in the world and thriving.* (Principal)

In this study the participants perceived lifelong learning to be an extension of, and outcome of independent learning. It is perceived as the continuous building of capabilities, and application of these capabilities beyond school and throughout life. The students' learning experiences provided through the school library were viewed as "lasting" and encompassed a range of capabilities – motivation and passion for reading, engaging with information as experts, using

information to solve problems, accessing a variety of information sources beyond the school library, and experiencing success as a key outcome.

A principal sees the school library as the place to develop life-long learning skills.

> Complain as they might about a lot of the work, what [students] are learning [in the school library] is that you have to be a lifelong learner to be successful. That's what we're trying to instill in the kids, and the library is a significant place for that. (Principal)

A Special Education teacher gives her view of lifelong learning in the school library.

> I think a good school library, which is what we are, promotes lifelong learning skills. When I say that, I mean I see students here when they get a book . This [experience] is going to last for a lifetime. We have newspapers. They pick up a newspaper and that goes on for a lifetime. You can't take that away. We foster independent learning for life, coming in independently, looking for what you need, being able to do that, maneuvering, knowing where to find things, finding resources that you actually need to learn - to aid your educational process. We definitely do that. They get to learn about technology in addition to that, and they have a relationship with the librarian, which is the most important thing. So they'll use the library all the time. That's extremely important. (Special Education Teacher)

Another Special Education teacher describes how the school library helps students

> I think the library turns the students into lifelong learners. It shows them that they can choose to read books not just for school but on their own, by having reading role models and different displays. When they come back from summer I usually have some eye engaging display of books so it shows the kids that books are friendly. Our classes come here and do research so it does make it that kid of friendly learning environment, so whether the kids realize they are learning or not, the librarians are providing skills. (Special Education Teacher)

A fourth grade teacher notes the individual attention and encouragement students receive to become lifelong readers.

> I have written down what [the teacher] said about helping students select books because to encourage them to be life-long learners we have to encourage them to read. I cannot believe the number of times [the school librarian] has spent [time] helping students

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select just the right book. To really encourage them when they come in and say, "We can't find anything to read." So I think that encouragement to make them see that there is something in here for them too [helps them] to be that lifelong learner, reader ...
(Fourth Grade Teacher)

A principal notes that students become problem solvers.

What I see as the primary things that happen [in the school library] are how kids can move on to be problem solvers, lifelong learners, thinkers, inquirers for the rest of their lives. (Principal)

The principal views the school library as an agent of equity as all students gain skills for lifelong learning.

One of the original things that we talked about when we first started discussing this question was lifelong learning and what the media center and the media specialist do to help students develop skills for lifelong learning. This ... is an example of what happens dynamically in this library. It's not just the students who are headed to Harvard who are taught the skills that are needed for lifelong learning. It is every student in this building, whether they know they are learning or not. We have no idea what these kids are going to need to know in ten years. The best we can do is give them the skills to get them what they will need in ten years, and those are critical thinking skills, researching skills, writing skill. That's what we do. It's necessary that they understand the research in biology that went in to determining what DNA is for and what the structure is and how it's used. They need to understand that research so that then they can figure their way out of a problem, whether it's in the science field or not. It's knowing how to approach a problem. That's a life skill, the same kind of life skills that this media center absolutely promotes. This is demonstrated by the kid out there reading. It's about this kid wanting to know about the next generation of BMX bikes. Rather than asking his buddy, he's got a life skill to find information. He doesn't know, he thinks he's just chilling, but he's developing a life skill because resources have been made available to him. (Science Teacher)

An English teacher sees the school library as forging a path lifelong use of public libraries.

I think all educators' have the goal for students to be life-long learners. Building on what _____ said – I think the library is the heart of that. I think it's sad to say that some children - for whatever reason - don't get to go to the public library - so the school

library might be their first introduction to a library. If they are comfortable in the school library, they'll branch out, and when they're out of school, if they don't pursue higher education, hopefully as citizens they'll feel comfortable going to the public library and feeling the same way about it. (English Teacher)

Some participants in the study also made the connection between independent learning and lifelong learning. Transfer of learning was viewed as the application of skills and knowledge that were learned in one situation [and transferred] to another situation at school, or outside of school.

The Impact of Transfer of Learning

[Students} have developed research skills and extrapolated them to lifelong learning and careers. (Teacher)

An English teacher describes the technology skills her students learned that they can transfer to other learning situations.

> *For my mythology class the students had to take a myth for a project they were doing and they had to make it into a modern TV show or a modern form of entertainment. They had to make a trailer for their show and the media specialist was able to show them how to use different programs. There was Photo Story and Moviemaker. And they also used Photoshop a little bit because they had to do a poster as well. So [she] really helped them to develop those skills … They are using them in a mythology class now but they can use those skills in other aspects in their life beyond these classes.* (English Teacher)

A teacher talks about a student who returned to the school library to use its resources when he was in college.

> *One of my students just graduated and is a student at _____ College and the week before Thanksgiving asked me if he could come back here after school and have me log on to the computers so that he could access all of the electronic resources. He didn't realize until he went to use something that [his college] doesn't have it …* (Social Studies Teacher)

Students remember their high school library projects and how they relate to career choices.

> *Students come back when they're in college and they talk about projects they started in high school that gave them ideas to pursue as a major in college or a career. They got*

the idea from working together and using the resources, and from collaboration in the library. (Teacher)

The notion of transfer of learning was not limited to students. Teachers made explicit reference to their own learning through instructional collaborations and learning from each other and the school librarian. This shapes their own work as teachers, empowering teachers by improving the quality of their teaching, which ultimately benefits students.

The Social Studies department is sitting down with [the school librarian] to review an entire year - the transfer of learning - work that's done peer-to-peer – from educator to educator – our professional learning communities – almost looking at it as an information media literacy course. The transfer is going to trickle down into the classroom when kids are conducting ethical and responsible searches to really understand how to manipulate the internet. (Teacher)

The Partnership for 21st century Skills places value on the development of a range of what might be considered as "life skills:" The set of human skills acquired through the educational process that are used to handle problems and questions commonly encountered in daily life. In this study, participants equated life skills with competencies the students needed to "survive" outside of school: Managing their lives, careers in an intense global information environment, collaboration and communication skills. Enabling this was the provision of authentic learning experiences that develop real world capabilities. School libraries were not so much equated with information as for learning for life.

I think it's a goal of the school… to provide kids with the skills they need to survive outside of school when they graduate. The library definitely helps to reinforce the academic skills we would like them to have, providing them with the opportunity…it's really an environment that is conducive to authentic learning. (English Teacher)

The school librarian sees the school library as a training ground for life.

I think on a macro level, the kids learn from their experience in this library: What a library can for you, not just in school but for life, applying skills to careers and surviving in the world. So that if [students] learn that this is a friendly place, where people like to help (which is basically our job; we like to help) then it opens the door to many other libraries and opportunities for the rest of their lives. (School Librarian)

A science teacher sees the school library as support for career choices.

> *We have information on our webpage about careers and again our media specialists will show them how to access that information and along the same lines, once they find that information they also show them how to do a resume. They even have them make business cards. Those skills they may not have had before, they are now developing as life skills.*
> (Science Teacher)

Students also learn life skills.

> *They're learning group projects - Life skills and cooperative projects, so when they go out into the real world and have to work together they have some experience. It's not just you working by yourself.* (Science Teacher)

Students learn academics skills they will transfer.

> *The students don't … get it sometimes, but we try to impart idea that they're trying to get knowledge of the subject, and it's the process of how to investigate a topic, how to take notes on it – there are so many curricular skills but also life skills you know general academic skills that are gained from using the library.* (Social Studies Teacher)

Students learn workplace readiness.

> *A lot of our kids come to us without the concept of process and also the other thing is this: One of our responsibilities is to teach our kids workplace readiness skills. When our kids go out to the trades, it's based on process. So I mean we get the whole concept of process in to their heads and making it not something they have to think about, it becomes a habit with them. They know the process and they know the value of process. You're looking at successes.* (Teacher)

The School Librarian as Teacher of Teachers

We've worked with new staff as a professional developer so I think seeing the librarian in multiple roles also lends itself to making a really strong program that will continue to evolve. Because not only does the librarian work with students and teachers but as a collegial peer in a way that fosters cooperation and allows teachers to develop and help with all the different things that are facilitated in the library. (Language Arts Supervisor)

Professional development that is delivered at the point of need has been shown to be more effective than one-day workshops and half-day in-services. The school librarian is positioned to deliver effective and

training at the teachable moment, with ongoing support. This professional development model is not possible without a collaborative school culture that recognizes the valuable contributions of the school library to teaching and learning. A teacher notes the role that the school librarian plays in establishing and maintaining collaborative relationships.

> *The librarian encourages a collaborative spirit. I've also worked in two other schools, but I've never worked in a school where the librarian actually came and talked to you all the time. I'm doing a blogging project in January and back in October the librarian spoke to me about collaborating ... and helping me teach the children how to use resources that frankly I wouldn't do as good of a job doing by myself.* (Language Arts Teacher)

Teachers are willing to collaborate when they are convinced that the collaboration is productive and helpful in raising the quality of instruction and benefits students.

> *And the teachers, I've never seen people collaborate like this and pair up and get excited. And when the kids see the adults get excited they have no choice but to get excited. It's a good motivating factor. It doesn't work with every kid but it works with most kids. Most of these kids are getting excited because it is a unique culture in this building and our librarian really adds to that because he is a rare kind of librarian who adds to the quality of teaching here.* (Language Arts Teacher)

Because the professional development offered by the school librarian is hands-on, teachers feel that they are learning something useful, and are more likely to use it in the context in which they learned it.

> *... teaching the teachers ... has really been beyond books and research. The tools that they have made available to teachers have made me a better teacher and have helped me to create more meaningful and efficient ways to assess the kids as well as to engage them. So it has made my classroom so much more diverse in terms of teaching modalities as well as ways that [students] can demonstrate that they understand the content. They have given me so many tools for my toolbox that have made me a better teacher. I'm only a 3rd year teacher and I'm using technologies that I would not have the time to teach myself. I have a dynamic wiki page that our media specialist helped me to create. I would not have it were it not for her .... Both of them have just been invaluable as a new teacher because the kids can't suffer from my [learning] curve and they have helped me get so much higher on the*

curve in such a short time because of their assistance. And again because of bringing that technology into the school, free technology ... (Teacher)

The importance of team work and collaborative teaching leads to the nature of professional development provided by the school librarian. Along with administrative support from administrators on the building and district levels, and from teachers who operate within an open-minded culture of support for school libraries, is the school librarian who plays a dynamic role in building collaborative and collegial relationships among staff members through sharing of information-learning expertise, ideas, problems and solutions – all working together to build a better school. Part of the positive school culture was the librarians engaged not only in direct curriculum instruction, but also providing strategic and cost-effective professional development for the school in terms of learning in information-age schools. The school libraries were centers of interaction, connection and collaboration. They are places where people interact around their craft to improve their teaching.

The wider school culture of investing in school libraries, giving the school librarians the freedom to implement their professional expertise gives rise to a pervasive notion of school libraries as part of a "culture of help" in the schools. School librarians take an active role in nurturing this help, which creates further ripples of help. As one teacher commented:

> *When I have a break , I'm showing [other teachers] how to use the Smartboard ... If Media Specialist 2 hadn't taught me, I wouldn't know how [to use it.]* (Math/Computer Teacher)

Teachers and principals discussed the willingness and dependability of their school librarians.

> *[The media specialists] don't say, 'No.' It used to be that a school library was a place where, 'No' was the only word you heard and we all have those stories I'm sure ... Here they don't say. 'No' ... from the perspectives of their knowledge ... their mission; They have a clear vision of what they want to do as media specialists. The results speak for themselves I think. It amazes me every year.* (Assistant Principal/District Library Supervisor)

The school library staff is perceived as caring and engaged with what is happening across the school.

The reason this library is successful is because of the caring, engaging staff – not just the library staff, but the entire school staff because people here are involved in many aspects of their students' lives, and this is a large family. It's a community. It's one of the best things about this school when you think about it -open and receptive staff and administrators - Helpful library team. (School Librarian)

The School librarians as information specialists in their schools were not only engaged in providing collaborative instruction to students, they were acknowledged as providing one-on-one and whole school professional development to the teachers in their schools with a range of positive impacts: enhancing the quality of teaching and learning in the school increasing school library use, and building further instructional collaborations. The school librarians play a valued leadership role in collaborative learning – building and participating in a collaborative culture of learning that is targeted to quality instruction and learning outcomes:

When I need…I have in mind a particular project. And I'm not sure how to do xyz…I didn't know how to do an animation piece of technology or didn't know how to do a particular kind of research. I can call anyone of the librarians and ask would you be able to come into my classroom and teach my students and not only teach them but teach me as well. And they will drop everything and come and teach you and the students whatever subject, whatever content are, doesn't matter. They're wonderful. (ESL Teacher)

The school librarians are co-learners with their teacher colleagues.

Going along with [the ESL teacher]…I think that really the librarians here are co-learners with the teachers as well, and I think that benefits the students. But in terms of professional development, I've had very similar experiences to [the ESL teacher] in that a librarian here will not only learn whatever it is that we need in terms of our own technology or research skills but will also learn alongside the teachers and help the teachers to understand the material as well. And understand the skills, tools as well. (English Teacher)

I think teachers also learn. I know that just by sitting in the different things that [the school librarian has] done for staff and for students I've learned. So teachers should be able to go there and learn something also. Because I'm certainly not connected with the 50 different ways you can access information through the computer and pull information to make it useful. So I think that good libraries allow for teachers to be students as well. (Teacher)

A school librarian and classroom teachers provide examples of such development.

A pretty large group of teachers here participated in three summers of project-based learning training led by the library, and I think that has had a huge effect on not only the way the library is used, but on instruction as a whole. The project-based learning naturally puts the kids here doing research much more often, and also encourages collaboration between teachers, among students, in groups. So I think that's been encouraged just by making that available and encouraging teachers. You're writing lesson plans now as unit plans, understanding by design, so that's kind of where we're moving anyway. (School Librarian)

We taught my sophomores about copyright. They're publishing wikis on the internet. We thought we had nailed it. I can't put the wikis out because ... the instruction did not stick. [The school librarian and I are figuring out why.] What is it that we have to do? That's the kind of resource [the school librarian is]: Professional development ... where we are helping each other. We also invited in the educational technology team because it's going to be cultural thing that we're going to need to do here if kids are going to be publishing to the web. They've got to understand copyright, intellectual property, and things like that. So, the [school librarian] and I are basically teaching each other, teaching the kids, and learning with the kids and they see it. And I think that's powerful. (Social Studies Teacher)

The school librarian is a technology expert at the point of need for teachers.

But our media specialists will come in and will teach the teachers how to go about creating wikis, they will teach students how to access it. I know we had one of our media specialists worked specifically with our advanced academic literacy team and literally was an integral part in the development of the entire class. It was a class where we were allowed as teachers and instructors to take an idea and run with it. (English Department Supervisor)

School librarians spread a culture of collaboration and collegial help throughout the school.

...One thing that's great about [the school librarians] ... is that once they teach you, they can use you for a resource – that's how good they are at teaching – I'm serious – that's how good they are. ... We were lucky - we are were doing something together in the English Department: the [school librarians] taught a [teacher], and [that teacher] taught me, and then I taught [another teacher] and we kept teaching each other. And if this doesn't work ... [the school librarian] would come back in – and she's say ok try this, and then we got [another teacher] in the mix, and she showed us how to rewrite our goals to address another thing to help us out and we went back and added something else ... (Special Education Teacher)

The school librarian is considered teacher-friendly because s/he helps them connect with the two R's, Research and Resources, to be better teachers.

> *The library is not only student friendly but also teacher- friendly [about] things that are up and coming that teachers need to know about. [The school librarians] are always more than happy to set us on the right track and to show us all of the new things that are out there and all of the new technologies and the new methods …. And by making it teacher- friendly for us that translates back down to what we do with the kids in the classroom so it makes it student friendly. So teacher friendly equals student- friendly, which makes everybody happy. … [School librarians] make the two 'r's, research and resources … available to all of us. They show us how to do the research, they show us pathways. If I'm going to do a research paper, I do a little debate on the death penalty. [The school librarians] find pathways for the students to find the information that is accessible so that we don't have to find websites. They make those resources available to teachers, which makes it easier for us to make them available to students. … Our media specialists are constantly telling me to check [resources] out. They are always offering to get new databases for us, so they always keep us in mind. Anytime something comes up that is new I always get an email from one of [the media specialists].* (Social Studies Supervisor)

A Math and Computer Science teacher talks about being the student who gets wonderful lessons from the school librarian.

> *I have gotten a Smartboard and they have classes up here for teachers on how to use the Smartboard, how to use the grade keeper, how to use the various items that we have to deal with. Technically we were the students at that point, and we got wonderful lessons. I am now so thrilled because I'm using my Smartboard … I'm learning everything. … Right now we are adding the grades to the computer. Anytime we have questions, we come [to the school library] and it's school librarians [who] help us. [The school library] is used not only by students but [by] teachers [who] also learn things and see what [else] is available. … That's a nice thing, you know.* (Math/Computer Teacher)

School librarians in the focus groups identified some of the topics and themes of their leadership in professional development. These include inquiry learning, integrating Web 2.0 tools into the classroom, research process, blogging and wikis, and approaches to accessing and evaluating information.

A school librarian describes how she works with teachers.

Also with professional development, we're really lucky to have a lot of avenues for it and we take advantage of it all. We have what we call ATTC - academy classes that we teach [using] Web 2.0 tools. We've done one on the Information Search Process. We've done them on searching and evaluating materials. …That gets us a lot of business and it really helps us to work more closely with the teachers. We also have short skills sessions [that] teachers take on Monday afternoon. … the school has so many opportunities for learning – so many opportunities to share your learning and that really helps with collaboration. (School Librarian)

A school librarian shares her strategy for delivering professional development.

Short skills started as small mini-sessions that were about 45 minutes on a topic like blogging or animation and comic creators. This year we have a new model where the short skills are longer short skills and they're extended over six sessions. So I'm doing one with a science teacher on finding and evaluating information. _____ is doing one on the inquiry process … I'm doing one on Moodle which is a shareware for classroom management. (School Librarian)

This active leadership in professional development within the school was identified as a factor in contributing to the value of the school library

We have a lot of avenues here where we can share our learning, collaborate with teachers and learn from each other. I think that's one of the things that creates the huge success of the library. (School Librarian)

Qualities of Effective School Librarians

The librarian can't just be a warm body. You're really hiring a personality and an educator – a person who cares. (Research Science Education/Science Teacher)

What are the qualities of an effective school librarian who can manage the complex learning environment of the school library? Personality traits of the effective school librarian continually emerged from focus group discussions. A principal views the school librarian as resilient.

…a faculty dining room, a series of offices, computer labs - two full classes of computers going on …, two areas where students can hang out -seniors hanging out, kids eating lunch… you've gotta be pretty comfortable in your skin to be able to run a place like that and understand that there is going to be a day when there are four kids [in the school library] who don't have a pass and somebody's going to be ticked

off because [those students] are cutting their class and they're [in the library]. But
... good things...are happening ... (School Principal)

The educators, particularly principals, participating in this study often refer to the qualities of the school librarian as the major factor in the success of the school library program. What are the qualities of an effective school librarian that support the unique contributions that the school library makes to school culture and the concept of school library as pedagogical center?
A school librarian suggests that being non-judgmental with students and teachers establishes an atmosphere of open communication.

I think we are people who are teachers and our students know they can come to us for anything and they know we are not going to judge what they are doing. I think that is really important ... I think that is something I really stress with our kids, and the same thing with teachers. We want to work with them ... we're not saying, 'That's a stupid project. Why are you doing that?' We may say, 'Well, maybe instead of a research project have you ever thought of doing a resume?' You know, coming up with alternatives to support what the teacher is thinking. (School Librarian)

A teacher offers a similar explanation.

How about when [a school librarian] walks into the classroom and they're talking about things they've read in a book, and they know what they're talking about, and they're discussing it ... They provide you with lots of ideas; [they] never criticize. They just help you make your teaching better. (Teacher)

Teachers perceive that the school librarian goes above and beyond what is required to help them.

I can't even imagine how many hours [the school librarian] has put into my research course - more than I have been able to put in because I have other preps. They go above and beyond for a teacher – and they're not just doing it for one of us – there are a lot of us. (Research Science Education/Science Teacher)

School librarians are willing to go the extra mile to be supportive of teaching and learning. Some librarians maintain school library hours during the summer months.

[The school librarian] had a point about hours but I'm going to add on, if I may, that during the summer we have [school library] hours as well. And it's a great opportunity for staff to come in if we're collaborating on a project or need help or if we want to use some specific electronic tool.

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It's a great time to have the one-to-one session with some of our librarians who are so busy during the school year yet [so] they can spend a little bit more time during the summer. (Health and Physical Education Teacher)

An ELL teacher describes how working with school librarians during the summer helped her to prepare an instructional unit.

The three of us, during a couple days in the summer, were able to develop a project with the support of the social studies supervisor and my supervisor. ... We developed a packet for the kids with materials that were ordered through the school library and [the school librarian] researched everything and we looked at which topics the kids could use. We looked at their skills, and which questions should be asked and how the thesis statement should be produced and matched those up with materials. We came up with this solution which helps the kids. It helps the teachers who are not particularly well-equipped to deal with that issue in their class. That was one of the best summer projects I've ever been involved with because it had an immediate effect on the staff members, the kids, and it helped me. (ELL Teacher)

School librarians convey their vision for learning by building a profile of the school library as an active learning center with high visibility. Some participants acknowledged the existence of stereotypical views of school libraries, and were quick to point out that these were not characteristic of the school libraries in their school. A principal notes that his librarians maintain a high visibility as teachers. They like to spend time with young people.

One of the things that's really powerful when you come into the library is that [the school librarians] are so frequently with students. If I were to give a percentage, [I would say over 50% of the time.] They do the managerial work of running a center and still model with students and teach right alongside with teachers. [That is] a climate for learning and it happens right as you walk in the door. (Principal)

The English Coordinator describes the librarians as interacting with people and always accessible.

The library is absolutely the center of our school ... Our media specialists are so visible and so present every day. ... It is a huge part of the way we function ... If you forget about them for a day or two, they are firing off an email saying, 'Hey we are here if you need help with anything.' And it's true, you feel so welcome. You feel like you are doing a disservice if you are not encouraging your students to utilize everything that the library has to offer. They

are just interacting all of the time and they are both always accessible. ... They are never behind their little office desks. (English Coordinator)

The librarian is always reaching out.

I think [the librarian] is the kind of person who doesn't just sit behind her desk and wait for people to come to her. I think she reaches out. ... She reaches out all the time and tries to get more and more instructors, and more and more students to come not only for research but also to actually read ... I think she's helped to encourage students to do more reading [by] asking, 'What kinds of books do you need?' - reaching out to everybody in all aspects. (Teacher)

How do the school librarians see themselves?

Just putting ourselves out there and being visible, that's very important. I think once one teacher sees how we've helped a teacher, hopefully they'll tell another teacher. ... By being visible our teachers can see that we are a resource for them - we are not just the keepers of the books, we aren't just the book stampers, We are teachers. We are collaborators. (School Librarian)

The effective school librarian is seen as the antithesis of the librarian stereotype.

I think most people grow up with a stereotype with what a librarian is: ... Always shushing people and keeping order and everything has to be in a row. Here, our librarians are welcoming. They're engaging and exciting. They are involved not only in the library, in the media center, but in other areas as well. They really have an impact on the students and their lives. You can converse with them easily. I think that's a big part of it. (English Teacher)

Another teacher talks about the librarian stereotype.

I've worked at a school where the librarians were literally, 'Don't touch the books.' I mean they got upset when people touched the books! And nothing could be further from that here. [The school librarians] want kids to talk to them about books, about what they can learn more about, and they feel very comfortable doing that ... [they] are very easy to get to know. They make these kids feel relaxed and don't make them feel like they are watching them every time they turn around. (History Teacher)

A principal describes how the school librarian loves to learn and is a lifelong learner who wants to share her knowledge.

> *[The school librarian] was really interested in getting out to different places to learn this. 'I want to take this course, I want to do this.' So I provide the flexibility for her to go when she needed to go, gain the knowledge she wanted to gain, and then bring it back and use it for our students and us. So setting up the organization to support someone who already had the enthusiasm, already had the willingness, the personality – she was ready to go, we had to let her go – to some extent [laughter]. Everything she gets, she brings back. It becomes part of our society here.* (Principal)

A school librarian comments on the qualities of her librarian colleagues.

> *I think what impresses me the most is meeting the staff here at the [school library.] I've only been here a few months)…I'm absolutely blown away, not only by the resources, not only by the collaboration that goes on between [the school librarians] and the teachers and the students, but also what they're doing in terms of professional development… In order for students to be successful learners, teachers need to be comfortable in educating students and acting as support. The librarians are given many opportunities to share their knowledge, and they do!! So they're actually going above and beyond and not only educating the students, but empowering the staff to feel comfortable to follow in these roles that they are just amazing at.* (School Librarian)

Effective school librarians have a strong "help" orientation. They are people-centered rather than information- or resource-centered. A spirit of selfless help characterizes school librarians. Their mindset focuses not so much on their libraries, but their commitment to enabling multiple learning needs to be met.

> *When you come in, in the morning [the school library is packed. You cannot find a seat … all the kids are working. They're either researching, or just asking a lot of questions. I know they utilize the media specialists a lot because when they are doing a paper and they're not sure how to format it, they go to them and they ask 'How do we do this?' So it's more than just helping them with their research. It's actually helping them complete the assignments that they have to do for any given course that they have. It is the place of help for all. And I would say that most of our departments use the library. I know I'm here pretty often.* (Social Studies Teacher)

It is a proactive kind of help – anticipatory, communal, and targeted. It is built on knowledge of the particular dynamics of the school community, and it is provided in an open, welcoming manner to all. An effective school librarian is a pro-active professional who takes the initiative.

> [The school librarian] re-defines 'librarian' and I think you can see that around [the school library]. It doesn't just provide the information requested—it provides information you did not know that you wanted. So it's college application season and there's a piece of paper sitting there on what to do in a college interview, and information on how to take a CLEP exam for seniors and information on activities. _____ provides you with answers before you ask the question. (History Teacher)

An effective school librarian is not only pro-active, but solution-oriented. S/he is able to see the big picture.

> …There are some teachers who have not brought a class in [the school library.] But again, when I see kids coming in here, and I see four or five kids doing the same type of research, I ask them, 'What are you doing? What are you looking for? Do you have your assignment sheet? Can I copy it?' Then I'll make a pathfinder and send it to that teacher with enough copies for the whole class and a note, 'Some of your students had some questions. This might be helpful.' Sometimes, on the next project I might get the assignment in advance; sometimes they will bring a class in. And it's fine if they don't want to. They're only going to be that teacher for a year. I'll have an opportunity with another teacher the following year, or with another class. So I get to see all of the kids at some point in time each year. (School Librarian)

The school librarian is inclusive, offering opportunities to student members of the school community to feel ownership in the school library.

> The student library council members help us by delivering equipment or shelving the books, checking in checking out. They help with processing, they help decorating. Those students learn how to use all the equipment, deliver the equipment, and help the teacher set up. They are troubleshooters… [They] actually know where technology belongs, the resources, the DVDs, all of that. They use the computer to check items in and out so they learn a lot from being up here. (School Librarian)

A teacher relates how the successful school librarian is rewarded for being proactive and inclusive in the way she manages library funding.

I think one of the reasons why [school librarians] are given free rein with their budget is that [they're] always asking, 'What are you covering next year?' 'What supplies do you need?' 'What can we do so that when you come in [the library?], or 'What do you need for that project?' When I bring kids in here, I know the resources are here because I've been asked. … I can actually plan my assignments around materials here that are accessible for the class. I've told [school librarian], she's previewed them, and she says this is what we have, and it's like co-teaching. …. [The school librarian] is always asking, 'How can we make it easier for you?' 'What books can we order to make it easier, to help your classes?' (English Teacher)

Another teacher notes how the librarian respects the needs and judgment of her colleagues, establishing a mutual respect that moves the library program forward. She is not bound by stringent collection development standards, for example. She is focused on teaching and learning, and is able to sustain this as priority.

I wanted a particular style of dictionary for kids – a picture dictionary, From basic level through Advanced Placement we could benefit – no questions about why we need it. If you think you need it, they'll order it. (Research Science Education and Science Teacher)

The school librarian who is effective creates the ethos of the library that is an invitation to learning. A welcoming personality makes the library a desirable place to be where people actively seek help, knowing their needs will be met. Above all, it is a place where young people want to be.

I feel like it's a very welcoming environment where kids thrive and can do so many things. It's not just about books,; It's about learning how to research which is such a huge component as they become adults, so I think it's a really nice staring point to become mini-researchers. (Language Arts Teacher)

The school library reflects the dispositions and personality traits of the librarian. A principal recognizes the importance of library staff in the effectiveness of the library program.

I'm just going to say that I really think the library is only as good as the staff that's in it. I think a lot of why people feel comfortable coming here, and why it's so effective is because [the

librarian] makes it easy to collaborate, and easy to transfer what we're doing in the classroom to the materials here. (Principal)

The school librarian has high expectations for her colleagues and for her students, which are conveyed by high professional standards that are reflected in the excellence of the library's resources, services, Regardless of the size or aesthetics of the facility, it is welcoming and comfortable.

> *I know in the beginning of the school year, the 6th graders [who are new to the building] ... were doing tours [of] the classrooms, the gym, and ... the library. There is a wood entrance and the kids are in awe. It's like coming into the emerald city. They see it's a great place to be and our librarian is very open and welcoming to all of the kids. They see that and they fit in naturally to get things done. It's not a place to escape ... They know it's a place to get things done. It's a friendly atmosphere; It's not just all business here.* (Science/Math Teacher)

An effective school librarian likes young people and is flexible in creating a learning environment that appeals to them. They know that she cares about them.

> *And so [the school library] has become a comfort zone where we have an open lunch – the kids can eat any place in the building. ... You'll find consistently that the same kids come [to the library.] We have kids in a tutoring program who don't necessarily need to speak to either one of us. They just want to come and sit there and say hi and know that we're going to treat them nicely. They can read or work on something and I think they just feel comforted by the fact that we're there, and they can be there, and there are other people too. It creates an instant little group where everyone is allowed, and if you need help there are teachers who care about you, or librarians who care about you.* (English Teacher)

Effective school librarians are leaders and innovators who are not afraid to take risks, be creative, and do what best serves learners of all ages.

> *Right now with the curriculum redesign the library has been allowed to take risks...teaching blogging and things like that. [The school librarians] are seen as leaders and learners as well. Because we support trial and error, and we support continuing professional development, ... this facility and the staff [have] become top notch and [the school library has been] integrated*

into the faculty. [School librarians] are not the staff. They are faculty. And without that administrative support I don't think that's possible. (Social Studies Teacher)

Thank you very much for everything you've done, because it's made quite a difference, which I really appreciate. What students have in the library is the form of the library and the function of their study in class, which are intermingled so it's seamless. (Teacher)

IV. How Do Educators Envision Their Future School Libraries?

[The school library] is the nerve center – the heart of school academically [as] the reading center. ... Now it's just the challenge of maintaining it. (Social Studies Teacher)

Are school libraries a thing of the past? Participants in this study were invited to reflect on the future of their school libraries and to describe the changes that they would like to see. Despite the current budget crisis, three commented:

In our wildest dreams, extending the library and adding staff to assist the students, that would be nice. (Social Studies Teacher)

Educators saw the high expectations for school libraries in their schools as a rationale for more funding for school libraries.

Because our principal has been able to keep us as a two librarian library for these six years, as [school librarian] 1 said, 'We've been able to rise to a certain level of performance that people have come to expect.' (School Librarian)

Our community has high expectations for this school. They come to expect this level of expertise and performance. That's part of the challenge, to maintain this with the ongoing challenges that we are facing with the state budget. (Principal)

The collective responses are a testament to the contribution of the school library to the success of the schools. At a time when the digital information environment is rapidly expanding and we are witnessing the closure of libraries across the country, there was a passionate call for upgrading and expanding the physical size and capacity of school libraries and increasing the number of professional school librarians in these schools.

Three educators called for both larger libraries and increased staffing.

Make it bigger; hire a third [media] specialist. (Teacher)

A principal notes the need for additional school library hours.

Physical space, in addition to additional staff, and the time - more hours. (Principal)

A school librarian added that in addition more resources were needed.

We definitely need more space, more people, more resources, ch-ching, ch-ching, ch-ching. (School Librarian)

Increasing the Size of School Libraries

If I could change anything to make it better, I would make more room in here [laughter and agreement from group] … I would expand [the school library]. I actually think it's such an integral part of this school that if I had my way about it, the funding would go here first. (Teacher)

Teachers saw high use of the school library as a rationale for increasing library space.

It is crowded in here before and after school so if we had an unlimited budget, wouldn't you like to have more room? (Special Education Teacher)

The school librarian wants to expand the library's instructional space.

This is very, very small for the number of students we have. We have about 1,860. Our library is rather small and outdated, truthfully. I am so happy to have 36 computers, but {the second media specialist] could be teaching one class and I could be teaching another if we had more computers and more space. Sometimes we are like gypsies. We are all over the place jumping from lab to lab. (School Librarian)

Another librarian wanted to recapture space s/he has lost.

This library used to extend beyond these walls. It was chopped away for classroom space that was still needed. We are still very desperate for space in the building. We rent space in a church nearby for classrooms so it's really very important that we have this construction that is on the table coming down the road. Those are big, big wishes to have extra help and to extend our space. (School Librarian)

Another teacher saw access to the library as an issue.

First thing I would change [about] the facility [is to] make it larger because access to the library is always an issue. [The school librarians] are always trying to service a large amount of students and break it up throughout the day so they can get everyone in here and get them what they need. So obviously the facility could be expanded. I don't know if that's part of the plan with this building expansion, but hopefully [it is.] (Social Studies Teacher)

A school librarian confirmed the need for a larger library.

Well, that's exactly what I would want. My first thing would be to expand the library because there are some times when I have three classes in here and most days I could easily have two classes in here at a time. If I could take this whole wing and turn it into a library… I know they had thought about it at one time under our former principal, but I guess the budget constraints were too much. (School Librarian)

Several participants saw the possibilities for larger facilities enabling them to differentiate their teaching to meet diverse student needs.

If I could see anything to improve the library, give the students and staff space to meet the different needs of students whether they're at risk, special needs, or gifted so that all of those different kinds of students can mingle at one time. …having [more] space would be a luxury that would support all the learning things that we're looking to do in our classes. (Language Arts Supervisor)

Collaborative learning, an important educational belief that supports school libraries, was viewed as a teaching method that requires more school library space for group work.

Small group areas where students could sit and talk or teachers could meet with students and discuss. We're a crowded building and there are times teachers are not in their own classroom

because someone else is teaching in that space. It would be nice if you had a place you could meet with your students, and you could come [to the school library] and be in a small group. (School Librarian)

The school librarian saw collaborative student work as essential for a 21st century education.

In the 21st century skills that we talk so much about working in a group is how these kids are going to work. Even more than we ever did. They're going to have to work together and collaborate and communicate across country barriers ... we give them practice here doing that, which our teachers do in their assignments, but it's difficult because we don't always have the physical facility to do that. (School Librarian)

Existing library space was seen by several focus groups as inadequate to accommodate collaborative learning.

[School libraries] need spaces for people to break out into smaller learning [groups] whether it be 2, 1, 5, 10, 25 [students], and you'll see that if you come during the school day ... every inch of [the school library is] used ... You'll see kids doing paired stuff between the aisles of the book racks. (Supervisor, of Instruction)

Some teachers want more space, but in discrete areas that are small in size.

I was thinking that we need smaller rooms where students can collaborate ... this year the Language Arts Teacher and I do the school newspaper ... and I had a group of students who were writing a jingle for some eighth grade class and they didn't have a place to go ... so I told them they could go in my room but not to tell the principal... Now they were students who I knew I could do that with. If there was a place where you didn't have to worry, where they could go do that work and there is supervision ... I think that would be great asset to the school and the library. (Seventh Grade Social Studies Teacher)

Recognizing the nature of social and collaborative learning in the school library, educators want a coffee shop in the library.

> *I don't know about the potential mess, but maybe a little coffee bar ... more on the other end [of the library].* (Sixth Grade Science/Math Teacher)

> *A coffee shop would be good.* (Fifth Grade Teacher)

Classroom teachers want more space to teach their subjects.

> *...Satellite rooms in each of the content areas would be fabulous. In a perfect world that would be great because we have the different floors, the different areas. The school is set up with different wings and different subject areas ... we have a wing for social studies, I know space is at a premium right now, but if we could have satellite rooms in each of the content areas that would be fabulous.* (Social Studies, Teacher)

The focus groups discussed increasing and diversifying the range of learning experiences through expanded space that was tailored to meet their specific content areas teaching needs. Participants were very opportunistic here, articulating how additional space would enable them to enhance their teaching and offer richer learning experiences for students. Certainly there was awareness of the financial implications, but they were eager to dream and express their views and needs.

Another consideration that drove teachers' wish lists for more space was the perceived need for more technology. In particular, they want to use information technology to support students' creation of learning outcomes that represented what they have learned, as well as to support diverse learning needs and their diverse teaching methods, especially technology integration.

English Language Arts teachers saw the need for writing labs to facilitate the writing process.

> *Perhaps that would be the English teacher's writing lab for extended writing and things of that nature.* (English Department Supervisory)

> *It would be nice to have a complete lab where you can bring your class separately. The kids work better at desks ... A computer lab, but with easy access to the books ... Not a separate space - all integrated.* (English Teacher)

> *I would suggest a sound proof computer lab type classroom that is separated from everything else that is going on in the media center. So that that room would be a dedicated room to do instruction with computers and there are no distractions for those students who are in class as well as those who are trying to use the library to work quietly. And separate little stations with computers for the kids to have access.* (English Teacher)

A Science teacher wants to incorporate media into students' creation of learning outcomes that represent their science learning.

> *We could have extra rooms outside of the library, One could be for filming and recording, a nice little quiet studio where groups of four or five kids could record for podcasting and things like that, and videotaping because we don't have anything like that in this school and the library would be a nice segue way. … There are kids who are shy and would want to do something like that in a large group. If we could get them in one of those rooms they will feel as though at least they got that opportunity. That would be amazing.* (Seventh Grade Science Teacher)

Language teachers want language labs.

> *I would love to see a language lab and I could really have more [computers] in our computer lab here and … a section of the library or media center where you could take the kids in and hook them up with the audio visual. I know there are so many things you can do on the computer now, but [first.] a designated area for foreign language.* (Language Teacher)

A World Languages teacher wants to turn the computer lab into a language lab.

> *… where the kids could have visual texts on the computer to be able to practice their speaking, I guess if that could happen in the media center I would love that. Another thing I would want if I could wave my magic wand … I would love to have web cameras on the computers so that our students could connect with other students around the world and have conversations in Spanish or in French, if the teachers could arrange that, so they could connect in that way.* (World Languages Teacher)

A teacher saw the need for an English Language Learning lab that would be

a place for English language learners to be welcomed, to come in and to get materials in their language [and] to work with the MP3 players more. I think it's a terrifically underserved population. Here in the library ... I want to do more for them. Because often those students do not have technology at home, but technology is the key to them assimilating into our school culture and the national culture. So ... that would be one reason why the MP3 players are [in the school library]: To help those students, because they're reading Tom Sawyer – the dialect is ridiculous for them, but if they could hear it and read it... That would be what I would do if I had that magic wand. (School Librarian)

A Special Education teacher sees the potential for a transliteracy approach to literature with her English Language Arts students.

My language arts classes are reading a John Bellair's books and they are always asking me if there is a movie about this book because ... because they love to tear the movie apart if it doesn't match the book. I told them ... they could go on YouTube and find what high school classes have done - plays of different scenes, and they get so excited and ask if they can do that. They want to write scripts and make videos and as the teacher I find that very exciting. That would be great I could get all of these lessons out of it, but then I think of the time constraints and bringing everything in, but ... if we had more space and things were set up it would facilitate and open up those doors. You do see a lot of classes actually posting their book interpretations. (Special Education Teacher)

Special Education teachers see the need for more computer space.

The computer space too, if we could expand it that would be great because our librarian does computer lessons. We have the smart board that downloads all these resources that help with the instruction. (Special Education Teacher)

Special Education teachers recognize the importance of being in the library, but in their own space so that there students are not distracted by other students.

...I would agree with the English teacher for having a separate classroom area ... [to help Special Ed students] to focus more, especially if they already have focusing problems. So many times I will bring students [to the library] and the door opens and the kids are turning around to

see who is there … So if … they had a classroom in the library then maybe [the students] … would be able to read to [other students]as their peers … They could be using the [reading] program with headphones on. (Special Education Teacher)

… a little more of a quiet area as a classroom, so when I bring my students here for class they would be able to focus. *(*Special Education Teacher)

Other classroom teachers also expressed a strong preference for small, quiet spaces to use with their students.

It's all based on expansion, but some type of quiet study area where kids can focus, study for a test, or just … read. I've seen [this] not just in the colleges but in public libraries. they just have the single desks, kind of off to the corner. (Sixth Grade Science/Math Teacher)

So definitely, small areas for study sessions in the library would be an asset. (Social Studies Teacher)

Educators also wanted a space for meetings and conferencing with students.

I think we need a conference room. My book club meets in a classroom because the library is too noisy. I think we need that. (School Librarian)

They also see the need for teleconferencing facilities in their libraries.

Another thing that we could have as an extension of this [library] space [is] a room in the back for teleconferences. We could have all of the equipment up and make the auditorium a teleconferencing cable auditorium. I see teleconferencing as something that should be brought into this space, not on the same scale as the auditorium [which] *… can seat several classes …* at one time. You could have a couple hundred kids in [the auditorium, but for a more intimate experience we could do that here. (Director of Technology)

The school librarian wants a place in the library conducive to reading.

...I wish we had a high ceilinged library with a dome with different areas where you can go. And, in fact, you know what we're missing a comfortable little corner where there are comfortable sofas and chairs, like you would see at Barnes & Noble or the Cherry Hill Library, where kids can just come, and it's well lit, sit down and be comfortable and curl up with a book, and really enjoy it. Come in during their free time that they may have during their intervention and enrichment period. Or come in during lunch/recess, if they wanted to read. That's a fun thing to be able to do and it's a comforting thing to do. To be able to ... come into a library and sit in a nice comfortable chair and curl up with a book. (School Librarian)

Embedded in some of the above statements were explicit references to continuing to expand and upgrade information technology capabilities. The value of the library was clearly seen in its intersection with print and digital resources, and there was no indication that the print-based resources should be reduced. At the same time, it was acknowledged that digital information services were expanding, placing increased demand on technology and the need to continuously improve the technology infrastructure, accompanied by specialist technical expertise:

A special room with more computers and a technical expertise right there, hired to just oversee any problems that arise. (Seventh Grade Science Teacher)

Educators want to include an information technology place for teachers.

We need a technology available space for the teachers to play and we need personnel ... Media Specialist 1 extended the [library] hours, not because we are paid for that time, but because we see the need and we fulfill the need. That isn't always an option for us: There are meetings before or after school that pull us away from the [library] space. (School Librarian)

Teachers realize the importance of networked systems in their schools.

You wish sometimes the networks were up-to-date ... in every element of our school. This is a library, but they actually help us with all the networks throughout the building – there are apples in one room, and we have Macs in another [room]. [The school librarians] help us with all those things. I'd like to have [the networks] up-to-date with whatever we need throughout the building. (Special Education Teacher)

Schools struggle to say current with wireless networks and laptop computers..

> *Another thing we are expecting to do later this year is put wireless in and more laptop availability.* (Director of Technology)

The principal responded:

> *Yes, I want the whole building to be wireless, but that has nothing to with the library itself. … We just need more equipment. If we had more equipment we could have more mobile labs and digital laptops on carts to run into classrooms, it's just extends the boundaries.* (Principal)

Another principal talks about a commitment to improving technology.

> *I just want to add to the culture, I believe that from the facilities standpoint we have a fine facility. We have technology that we enjoy having, and I would like to have more. It's a goal of ours to always improve our technology.* (Principal)

The Wish for Increased Staffing

Clone the librarians. Let's have more of them. (History Teacher)

The second wish expressed by several groups was an increase in the number of professional school librarians in their schools. Notwithstanding budget ramifications, there was, across-the-schools. support for increased professional staffing, with some references made to increasing clerical staff. The librarian joked,

> *I would like to be able to clone myself. (School Librarian)*

The principal agreed.

> *And then maybe legalize cloning so we could have an extra [school librarian's name] [Laughter]* (Principal)

Educators explained why they saw the need for more staffing in the library.

> *We need more people, obviously, the technology person. It's awfully difficult because he's the only one. Now everybody is moving to these digital projects and using technology. We're always*

[in the school library] bothering him. We need [more staff] to be able to teach and he can deal with the technology. (English Teacher)

A Special Education teacher calls for a full-time assistant for the librarian.

Even having a full- time assistant ... would be great, but again budget cuts being what they are ... I mean I know you've had more help before but to have another assistant librarian - that would be great because [the school library] is being used.. (Special Education Teacher)

A principal has been able to maintain two school librarians.

Most important thing is having two librarians. That has made a tremendous difference. ... we need to have two people in [the school library] who are able to assist the students, the staff and even people from the community who sometimes will call with questions. That would not have happened were it not for our principal. The fact that he actually enlisted and saw the need for the second librarian, is the reason why [the library] is where it is today - because he had the foresight to say, 'Yes, we'll get a second librarian.' (School Librarian)

Other Wishes

The educators had other ideas beyond increases space and staffing for school libraries. While inappropriate use of the school library was not raised in the conversations, there was a concern about the appearance and furnishings of the library.

As I watch kids and teachers in library – our environment and our actual furnishings need to be adapted to the description we've given you the last 45 minutes ... we're moving to a different [school library] model with this being the hub of the school and I look forward to seeing the actual environment change to respond to those needs. (Supervisor of Instruction)

A Social Studies teacher raised the issue of library closings, which was followed by a murmur of assent from the group.

Something that could be enacted quickly is to just let the library be just the library. Don't use the library as someone's classroom. Don't close the library for testing. Don't close the library down for voting all day long. I'd be happy to help find somewhere else to put voting machines, Don't

close the library down when there is a heating problem in some other classroom because while those 30 students have a classroom, there are 1,800 other students that don't have a library … 150 … teachers don't have a library. I'd be happy to help monitor students in my classroom, I just feel like other solutions can be found. The library needs to be a library and it needs to be open… (Social Studies Teacher)

Educators want the library to offer extended evening hours.

…The amount of time that [library staff] give to keep this library open that's unpaid is heroic. We know that being able to open this space at 6:45 in the morning … Keeping it open until 9:00 at night is a critical asset to not just our school community, but globally. (Supervisor of Instruction)

[The school community] was taking advantage of the library evening hours as a way to do that, and they were so disappointed when it stopped because it was just a grant. (History Teacher)

A teacher wants the school library open during the summer.

I think If I could have a magic wand I think I would love for our media center to be open all summer long and I would love for our community members to be offered things like training our senior citizens … how to do PowerPoints or access email. There are so many senior citizens that are out there and their world has remained small because they have been able to keep up with the technology changes. (English Department Supervisory)

What did the school librarians want?

The focus groups were interested in having time to engage in more instructional collaborations. While it was very clear that the school librarians were engaged extensively in instructional collaborations across their schools, they wanted to do even more, notwithstanding time and staff constraints. They saw that this would continue to build even more widespread curriculum integration and strengthen the interdisciplinary learning and teaching taking place and get more teachers involved in the school library.

The school librarian envisions the school library as a place filled with people and technology.

I want people to look in Windows. I want them to see people. I don't want them to see books. I want them to see people or technology, and feel they are invited in. (School Librarian)

A librarian talks about having more time to interact with teachers.

> *On my wish list, it's intangible, but more time to interact and do interdisciplinary things and all the great things we could be doing. [A classroom teacher] is teaching a great class with the English and History departments, and I am so excited about that and it shows the kids that these subject areas are not meant to be compartmentalized; that everything is connected and it all goes together and it gives them a stronger foundation for learning and understanding collaboration.* (School Librarian)

Another librarian agreed, but noted a misconception among some teachers who do not see the connection between information and learning in their content areas.

> *I'd always love to work with more teachers. I think there are some departments that don't see us as being able to work together, they don't think their subjects mesh with us.* (School Librarian)

This school librarian wants more time to work with teachers across the curriculum.

> *I think one thing I think that could help with that going forward is just having time where we do interact, not only with different disciplines … even sitting here today I'm thinking for our next paper I'm contemplating having them pick one controversial topic, be it in history or science and having the kids writing a persuasive essay in response to that. Having the access – [sitting] down with the Science Teacher … with the History Teacher. I think so often there is so much to do and we don't always get to make that time. It's difficult and rarely is it with every [subject].* (School Librarian)

This school librarian explains how she creates opportunities to work with subject area teachers who are not typically school library users.

> *Working with Math, PE teachers opens us up to what we can work on together. What we are talking about is not just teaching skills, it's dispositions, it's the teachers' attitudes about learning. That doesn't mean we have to do a research project together … We … get one person who is the catalyst for getting other people, so we just have to get one.* (School Librarian)

School librarians talked about assessment and feeling part of the collaborative instructional unit from beginning to end.

It's kind of catch-22 because the more we collaborate with staff and get more people coming in here the less time we have to spend with each of those classes. And I think that's one thing that's difficult for me because I really value seeing the project all the way through. Of course, we all do as teachers and as librarians and many of us feel like we miss out on seeing that end product and being a part of that process from the beginning to the end. Not just showing resources, but being able to see [students] show their blogs, give their speeches, help to look at the papers. That's really something I wish I could be more involved with. (School Librarian)

School librarians want to see student progress over time.

I wish I could see the students' growth from freshman to senior year so that I know when I'm wrong or where I've succeeded. Because that's how teachers can gauge learning but how can we as librarians really gauge how we've impacted students if we see them one or two times and don't know who they are. I'm really sad about a class that I've been working with every week now since the beginning of school year. It is just about to come to an end and that really lent me this opportunity to get to know the kids and feel like a teacher. And it really is a special position and it's wonderful to know how you helped education and a lot of times I don't think we get to see that. And I wish we could do that more. It's such a powerful feeling and it's really something I could experience every day and not just with a few teachers. But where's the time or the people to accomplish that? (School Librarian)

School librarians want to be included in the assessment of learning.

I think time, if I could wave a magic wand…time for more collaboration and more planning time with teachers. … We have four blocks in a day and there's three librarians for 3,200 students. We can work with some class's projects from start to finish but it's impossible to work with all from start to finish so the challenge is how do you manage the time and the projects and the interventions? So I don't know if there is an answer. That is something that we have conversations about as we move more toward thinking about where in the various curricula we can implement assessment and where is it most effective. Information literacy moves with various assessments that look like they might be coming down the roads. Where do we fit into that picture? And I think also with the magic wand, is if the State of New Jersey can adopt standards for the library. I think that would be so validating. Especially as information literacy will be something that will be assessed in the future. It is so important in daily life. (School Librarian)

School librarians want to learn how to incorporate assessment and feedback with their teaching and feel the need for professional development.

> If I can wave my magic want, someone would tell me how to incorporate assessment and feedback mechanisms where students—they're often called interventions---where students are getting valuable feedback from us when they need it and we can be more involved in the end process and not seen as some students still do, as the lady who teaches us how to use the library. Who shows us things? How do we, in a school this big, how do we do that? (School Librarian)

This school librarian sees assessment as feedback for improvement of her professional practice.

> I would want more teachers consistently bringing students to library so I could be sure I was reaching every student and giving them certain skills. More teachers coming in and you're working with them and their students, makes it easier for teachers … {I want formative assessments, more collaboration, [going] deeper to develop research projects, more information about input into assessment of the final project, student learning. Sometimes I thing a project is great when students are in here, but [I] didn't see the results. From some teachers I get feedback, but in my previous position, I did a portion of grading research projects. So a lot of what I know is from doing that grading … (School Librarian)

This librarian wants to engage in reflective practice as she thinks about how to improve her teaching.

> More participation in assessment: Working with other teachers you talk to each other about what worked and what didn't. We'll change this for the next time. That's great! (School Librarian)

The school librarian takes responsibility for spreading the word about the school library's work.

> I often speak about the research that's going on … but I could read about it too. You could just post it, what research projects are going on, and in what departments. I think you would enable people who would be interested in working in a more interdisciplinary manner. It would give them the opportunity to know what was happening in the school - different things in different departments. (School Librarian)

It is not enough to create a buzz within the school building.

Our students love this place, they want to be here. Our teachers see it, but outside of these walls they only know what they hear from others … Students know that they love it here, but they may not go home and tell their parents. It's worrisome that that could potentially impact the funding. That it could affect what we are able to do and continue. Yeah, I'd love to change that. (English Teacher)

Some school librarians have a strong sense of community that extends beyond the walls of the school.

If we had a wish list I would want to reach out to struggling people. Even in _____ County there are people who don't have access to computers, and honestly it is very difficult to get access to the computer in the community library. And since we have the 36 computers here on a daily basis, even if we couldn't be open full time, at least on a part time basis so that the elderly realize what their tax dollars are doing. Very often we forget about that particular population and it is very hard for them to see sometimes. They are struggling and I understand that. It costs a lot of money to educate young people but if they could also expand their world and realize that there is so much out there that they could have access to with a little bit of training I think that would be really grand. (English Department Supervisor)

There was discussion about disseminating the value and success of school libraries and community outreach.

The idea that the library is a place that you want to go to, that's something that needs to be continually fostered and told. It's an important place, it's more important than the mall. (Seventh Grade Social Studies Teacher)

Budget Cuts

Participants saw the future of school libraries threatened by budget cuts in education. This surfaced in several focus groups.

What I worry about is the atmosphere in our state right now. If there was something I would change it would be that atmosphere. Education is important and instead of attacking all of education let's look at what works. Let's have some of these leaders come and look at this school and look at what's going on in this library and around the library and say, 'How can we

duplicate that?' instead of saying let's cut it. I think that is something that needs to be communicated to the public: ...how important a strong library is to a sound education. (Seventh Grade Social Studies Teacher)

The principal agreed.

You're right, in New Jersey one of the downsides to the budget cuts is that one of the areas that is being cut is the libraries and media specialists. There are a lot of librarians, some you know in your network, especially at the elementary level, that are losing their jobs ... (Principal)

A Social Studies teacher voiced his concern about the political climate and education.

I'm very serious when I say this. State officials, realize how important this work is and fund it, and stop attacking the public schools. [When you] pull away public funding and question what teachers do, when you send that out to the public they won't support spending $50,000 for databases and books. Or we may need $60,000 for another staffing position. Well that is important because without any of that, none of this is possible. If I could change anything, it would be for the current administration to knock off everything that their doing right now. They're wrecking everything. (Social Studies Teacher)

A Science teacher voiced his concerns.

We need a shift in public attitude about libraries as well because right now, we're in a state where library funding has been cut. The attitude of our political figures – they don't see the value in libraries, and it's not just about books anymore ... (The school library) is a place where the community can come, like the bilingual programs on Saturdays, or the after school programs. If the library was the hub of every town or every school – maybe we would also shift the workforce in our town and kind of have that trickle down and that rippling out effect where the community feels more empowered by education, as opposed to complaining. (Research Science Education and Science Teacher)

There is anger among these educators who feel as though they are making a difference in their students' learning that is not valued by government.

Overall, participants at all levels and roles in the schools were deeply concerned by budget constraints, and the potential negative impact of reduced budgets on the work of the school library.

A principal shared his insights on the budget crisis.

> *The simple answer for the principal is I'd like to find more ways to remove the barriers that are in front of us. There is great vision that is articulated from the media center specialists and their supervisor and then we are dealt with the realities of school funding. We've talked about writing labs and math labs, [and] more teachers [in them.] We do put a priority on staffing and having people up here so they can accessible and available, but every time we lose staff members we lose duty periods, we lose the ability to create programs so we can have more going in here. It gets harder to repair computers. There are a lot of things that are barriers right now for us taking what we consider a very special part of our school and continuing to see it improve and get better which is certainly a goal of mine and a goal of theirs. We also know that in three months we are going to hear what our budget is for next school year and that may mean that we have to place more barriers. We are eight years old and have almost 900 computers, well what happens when they start breaking? Now all of sudden, where do we put them? Do we put them in a classroom where kids are learning? Or do we leave them in the media center where it's helping to improve our school culture? We're in a place where we are being forced to make these kinds of decisions. … the impact [of school libraries] doesn't just come down to a test score or impact [of school libraries] on a test score that we can't measure. You see it now where we are going to give merit pay for teachers, but how do you pay media specialists? We can't pay them enough money. All those constraints that are put on, it's not right that those things get in the way later down the road.* (Principal)

Another principal voices his concern that the crisis is not within our control.

> *We need a [magic] wand of monetary resources. The things that are being said are wonderful. I'd like to keep it local. You mentioned collaboration. Just keeping [the school librarian] full-time in the media center is becoming a problem, once you start seeing … reduction in force. [The school librarian] is now teaching outside the media center where she was full-time in the media center. We don't know if that's going to grow or shrink. Those things are not in our control. As those things happen on the outside, they have an impact on what happens on the inside. If we had*

a [magic] wand [we] could put the resources [in the school library] for staffing and materials that we need. ...We need the people intact, and I'm concerned about that. (Principal)

V.   Conclusion

The learning environment of schooling in American education has grown from the 19th century concept of a single, ungraded classroom and the "little red schoolhouse" to a complex, differentiated building that serves the physical, aesthetic, affective, behavioral, social, cultural, as well as intellectual needs of youth. Along with architectural changes have been pedagogical developments such as constructivist-based teaching methods, career education, and service-learning. When the paradigm shift of the late 20th century introduced information and technology to schooling, the technological teaching tools were initially additive, rather than transformative. Smartboards, e-book readers, Web 2.0, social networking, and mobile devices, not to mention the Scratch and Flash software enable young learners to become interactive consumers of information as well as content providers. An attendant shift in pedagogy, however, has not happened on a large scale. With an emphasis on technology, rather than information, education is missing the mark. While technology is important to 21st century learning, information is the raw material for constructing knowledge.

It is only recently that the field of "education informatics" is emerging as an area of research that recognizes the role of information in learning. Unmediated access to vast amounts of information through digital technology calls for a pedagogy of intervention and help from a learning specialist who understands information infrastructure and the integration of technology that facilitates learning. The school library is a pedagogical innovation that introduces a mature concept of help as integral to the delivery of information services to an educational setting. More importantly, school libraries support standards-based teaching and school curricula, and in so doing, they scaffold learning from the attainment of basic skills measured by standardized tests to more complex critical thinking that results in student creativity and innovation. While schools need to meet basic requirements for student achievement, this is a means to an end, and as such is no longer sufficient for preparing students as transliterate citizens who can live and work productively and creatively in digital environments.

As the educators in these focus groups clearly articulated, school libraries are not a dispensable add-on, frill, or luxury. They are an integral part of an education that is highly relevant to an Information Age.

Recommendations

We are pleased to provide the report of the findings of the NJASL Phase 2, and recommendations for taking action on this report. This is in accordance with the CISSL – NJASL contractual agreement which states that we would undertake a two phase research study and present findings that would:

(1) construct a picture of New Jersey's school libraries in terms of staffing, collections, facilities, budgets, and instruction in order to establish a baseline measure of the current status of school libraries in New Jersey.   (Phase 1, as summed up in the executive summary, and documented in the substantive data analysis and commentary)

(2) To understand the contribution of quality school libraries to education in New Jersey. (Phase 1, Phase 2)

(3) To understand some of the contextual and professional dynamics that enable and inhibit school libraries to contribute significantly to education in New Jersey, (Phase 2) and

(4) To make recommendations to New Jersey stakeholders to develop a sustained and long term program of capacity building and evidence-based continuous improvement of school libraries in the state. (Phase 1 and Phase 2)

Recommendations from Phase 1 are summarized here.

Part A: School Libraries and Transformation

A1. NJASL establishes mechanisms for the production and distribution of the findings of this study in multiple forms and formats to all educational stakeholders in New Jersey, to ensure that the findings are visible and provide the basis for the development of continuous improvement initiatives in schools.

A2. NJASL establishes a formal feedback meeting inviting New Jersey Department of Education leaders, school principals and superintendents, representatives of school board associations, targeted community organizations, and district school library supervisors and school librarians to participate.

A3. NJASL, in conjunction with various educational and community stakeholders, develops a shared vision document for the future of school libraries in New Jersey.

A4. School librarians use the findings of this study as a guide to benchmarking in their own schools, and to negotiate and establish continuous school improvement plans (i.e., each not more than a three-year plan) that focus on meeting targeted standards of professional and paraprofessional support for school libraries.

A5. School librarians engage in professional development that helps them create and implement information literacy instructional interventions linked to knowledge creation and sharing.

A6. School librarians undertake further professional development in relation to evidence-based practice to develop their skills at identifying, documenting, and disseminating student learning outcomes enabled by the school library program, particularly emphasizing curriculum outcomes and knowledge outcomes, rather than library-based outcomes.

A7. Given the importance of the instructional role of the school librarian, we recommend school librarians strive to meet the state Department of Education's master's level School Library Media Specialist certification requirements, enabling them to undertake a stronger instructional role in the school.

A8. NJASL should provide professional development to support evidence-based advocacy by encouraging school libraries to take an active stance in parent and community organizations.

A9. We recommend that in the ongoing professional development of school librarians in New Jersey attention needs to be given to continuing to develop library-classroom teaching partnerships so that contextualized information literacy instruction targeted to curriculum standards can take place, with a focus on knowledge development.

A10. It is recommended that school libraries establish a strong web presence, both within the school and as part of a broader learning-centered advocacy program.

A11. School librarians are encouraged to negotiate professional development / continuous improvement plans for their schools so that the development information technology competencies for teaching faculty and students are maximized, with particular emphasis on Web 2.0 technologies for content creation and representation.

Part B: School Libraries and Reading

B1. School librarians develop and implement more active or interactive reading programs to engage students.

B2. School librarians work actively to make use of the new possibilities for interaction created by the media such as magazines, games, music, and videos.

B3. Given a central focus in New Jersey on reading for learning, meeting curriculum standards, and reading for comprehension and understanding of curriculum content, it is recommended that school librarians focus some attention on implementing more reading programs and initiatives that involve the creation, integration, and sharing of information to meet curriculum content standards.

B4. It is recommended that middle and high schools in particular explore and provide a wider range of reading initiatives, suited to age, grade and curriculum standards to engage students and

maintain a vibrant and active reading culture to support both curriculum-centered reading and personal reading interests in all reading environments.

B5. It is recommended that school librarians work in and support programs and / or workshops on creative writing and to support youth publication of creative endeavors across the school.

Part C: School Library Collections

C1. To address the Fiction-Non-Fiction Gap, it is recommended that secondary school librarians give priority to building their fiction collections to comprise 50% of the total print collection in middle and high school libraries to support literacy development as foundational to supporting school curriculum.

C2. School librarians weed collections to raise the average copyright date, eliminate unused materials, etc.

C3. It is recommended that school librarians engage in an active and critical appraisal of the status of their reference collections, with a particular focus on aligning acquisitions with what is available digitally.

C4. School librarians conceptualize an integrated collection of print and digital materials that coordinates the content of the collection with the most appropriate formats.

C5. School librarians address the inequities in funding school libraries on the national, state, and local levels:

NJASL works on the state level to develop regional consortia for resource sharing within and among school districts.

NJASL adopts a statement of concerns about inequities in school library funding on the national level and submits these concerns to the Affiliate Assembly of the American Association of School Librarians through the Regional Director.

NJASL works to raise consciousness among school administrators for including shared learning resources in Race to the Top applications for funding.

NJASL works to identify Title I and other funding for supporting the development of multiple modes of literacy through school libraries.

NJASL works to identify funding for technology to support the shift from non-fiction print to digital resources that requires technology equipment.

The recommendations: Phase 2

As with Phase 1, Phase 2 of this study has generated a substantive body of data, and the findings have been structured to clearly identify patterns in the data which provide a foundation for the two wide-reaching recommendations that are presented here.

The collective findings provide a strong empirical basis for NJASL to work with vision and strategic leadership to shape a strong future for school libraries in New Jersey.

Recommendation 1.

We recommend that NJASL leadership establish a number of strategic task groups to work with the findings of these studies and address the recommendations. We suggest that each task group be given a time line, set goals, and document accomplishments within a specified time frame.

Task groups should include:

Vision task group, with the brief to develop a shared vision document for the future of school libraries in New Jersey. It is important that NJASL be seen as leaders in shaping the vision for school libraries – particularly the central findings surrounding the school library as a pedagogical center and digital citizenship, the role of certified school librarians and their teaching role, inquiry-based learning, and their role in literacy development. This should be developed through engagement with key personnel from the NJ Department of Education, NJEA, and other stakeholder groups, and distributed to all stakeholders, schools and educational organizations in the state. It should be the basis for all planning and negotiations undertaken in schools by school librarians, and a framework for local community negotiations. This vision should include guidelines for a school culture of collaboration, and include the educational beliefs that support a learning environment conducive to teaching and learning in school libraries.

Media task group, with the brief of developing a range of press releases, blog postings, and the like in order to build awareness of the findings of the studies. This should include strategies and initiatives that individual school librarians and regional groups could use to promote the research and harness community engagement with the findings. These should not be just made available to the media, but emailed to key stakeholders, e.g., school board chairpersons, district superintendents, community groups such as parent organizations.

Professional Outreach task group: the development of fact sheets about school libraries in NJ – which bring together findings about certification, collaborations, information literacy, technological literacy, reading activities (Phase 1), coupled with supporting rich "stories" from Phase 2 and which characterize the vibrant role that SL in NJ play in student learning in the state. This could also include tools for school librarians to use to present data about NJ school libraries to school boards and district administrators, in conjunction with vision documents. We encourage NJASL leadership to develop and institute connection through AASL's Regional

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director and affiliate Assembly to showcase the findings of the NJASL studies and to support initiatives related to the findings, and to liaise with other key organizations to the same end.

Professional Development task group: the findings present opportunities for NJASL to plan a strategic program of professional development that focuses on: (1) inquiry-based learning; (2) evidence-based practices to document the impact of school library initiatives; (3) using the findings to engage school boards and decision makers in continuous improvement and development of school libraries; (4) collection development; (5) reading and literacy development in digital environments. NJASL could shape professional development opportunities to produce courses that meet the mandatory 100 hours requirements for professional development. These courses could be made available to the whole educational community.

Products Development task group: The brief of this task group is to identify products that could be generated based on the findings. These could be made available for sale by NJASL and hence be a revenue stream for the association. Possibilities include: (1) Evidence-based practice manual and tools for the collection, analysis and dissemination of school-based evidence demonstrating the school library's contribution to student learning, and how this might be used in school, district and community forums; (2) manual and tools for using the findings data to do school and district benchmarking and to develop / negotiate continuous improvement plans.

These committees would need to work interdependently – sharing ideas across groups. Each committee needs people with a range of expertise – outside-of-the-box thinkers, writers, and the like.   We would encourage the NJASL leadership to target members with expertise to work on these task groups.   The CISSL group are members of NJASL. We can be part of any of those teams.

Recommendation 2

The data provided in Phase 1 and Phase 2 provide a strong picture of the what are the dimensions of effective school libraries, and the school librarian leadership of these libraries. This is an opportune time for NJASL to: (as examples)

- lead in the development of a visionary set of School Library Standards for NJ Schools, with endorsement / support from the NJ department of Education, which articulates the vision, goals and indicators of quality for school libraries in New Jersey,
- articulate a job description of school librarians in digital age schools that should be the basis for hiring school librarians in NJ,
- develop evaluation tools for school libraries and school librarians for use by school administrators, which include steps and actions for closing gaps. This would center on the findings in Phase 1 and Phase 2 which identify the elements / qualities / actions of successful school libraries. It should embrace the dimensions around which Phase 1 was

reported: certification, school library infrastructure, collections, instruction, as well as significant dimensions emerging out of Phase 2. In essence, these studies give clear indications of the actions needed by school communities and school librarians to build effective and robust school librarians as pedagogical centers. NJASL could develop a series of webinars and other professional development opportunities to address this;

- develop strategic planning tools that enable school librarians and school communities to engage in continuous improvement initiatives. We encourage NJASL leaders to examine websites such as: http://www.sldirectory.com/libsf/resf/studies.html#top which provides a directory of state wide initiatives. It would be wonderful if NJASL documents were listed here.

In summary. The task groups are challenged to create documents based on the findings of Phase 1 and 2 of the study that really chart the future of school libraries in New Jersey that would establish vision, benchmarks and continuous improvement through addressing

1) What does an effective school library of 2012 look like?

2) What does the school librarian do in 2012?

3) How are the school library and school librarian evaluated?

4) What can a school librarian and school team do to fill in the gaps in their own preparation and/or program?

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APPENDIX A

Focus Group Protocols

Focus Group Introduction Script

Focus Groups

SCRIPT: Introduction

HELLO, EVERYONE. THANKS FOR MAKING THE TIME TO BE PART OF OUR CONVERSATION TODAY. WE ARE HAPPY TO BE IN A REAL SCHOOL. WELCOME TO THE FOCUS GROUP EXPERIENCE. HAVE ANY OF YOU BEEN IN A FOCUS GROUP BEFORE? WE KNOW YOU ARE ALL GOOD AT FOCUSING, AND THAT'S WHAT THIS GROUP IS ALL ABOUT.

MY NAME IS _____ AND I AM _____. I AM THE MODERATOR OF THIS FOCUS GROUP. ACCOMPANYING ME ARE _____. _____, …. NOW IT'S YOUR TURN. WE WOULD LIKE TO KNOW YOUR NAME AND YOUR ROLE IN _____ SCHOOL. (HAVE PARTICIPANTS INTRODUCE THEMSELVES.)

OUR AIM TODAY IS TO COLLECT DATA THROUGH OUR CONVERSATION ABOUT SCHOOL LIBRARIES. THIS FOCUS GROUP IS PART OF A STUDY OF SCHOOL LIBRARIES SPONSORED BY THE NEW JERSEY ASSOCIATION OF SCHOOL LIBRARIANS AND CONDUCTED BY THE CENTER FOR INTERNATIONAL SCHOLARSHIP IN SCHOOL LIBRRARIES AT RUTGERS UNIVERSITY.

YOUR SCHOOL WAS SELECTED BECAUSE IT IS ONE OF THE TOP SCHOOLS PARTICIPATING IN THIS STUDY. YOUR LIBRARIAN REPORTED A HIGH NUMBER OF COLLABORATIONS WITH TEACHERS IN THE SURVEY ADMINISTERED LAST YEAR IN PHASE 1 OF THE STUDY. WE ARE INTERESTED IN HEARING ABOUT YOUR SCHOOL LIBRARY AND HOW IT HELPS STUDENTS LEARN. WE WILL EXPLORE THREE DIMENSIONS OF THIS THEME, AND WE WILL SPEND 15 MINUTES ON EACH THEME. THERE ARE NO RIGHT OR WRONG ANSWERS TO THE QUESTIONS WE POSE TODAY. WE ARE INTERESTED IN YOUR THOUGHTS AND PERCEPTIONS AND WE WELCOME ALL RESPONSES. EACH OF YOU HAS A UNIQUE PERSPECTIVE AND POINT FO VIEW AND WE ARE INTERESTED IN HEARING ALL YOUR VOICES. IN ORDER FOR ALL OF US TO KEEP OUR FOCUS, WE ASK YOU TO PLEASE TURN OFF THE RINGTONE ON YOUR CELL PHONE .

HERE ARE THE GROUND RULES.

THIS IS AN OPEN AND SAFE FORUM. OUR CONVERSATION TODAY IS CONFIDENTIAL. THIS RESEARCH WILL BE USED IN A REPORT ON PHASE 2 OF THE STUDY, AND NO NAMES WILL BE REVEALED. ALL IDEAS ARE ACCEPTABLE. WE WILL SPEAK ONE AT A TIME, WITHOUT INTERRUPTIONS. PLEASE BE PATIENT WITH FELLOW GROUP MEMBERS. SINCE WE ARE TAPING THE SESSION, IT IS IMPORTANT FOR ONE PERSON TO SPEAK AT A TIME. PLEASE RESIST THE TEMPTATION TO HAVE SIDE CONVERSATIONS. WE ASK YOU TO BE AN ACTIVE LISTENER AND PARTICICPANT. WE WELCOME YOU QUESTIONS, AS WELL AS YOUR OPINIONS, BELIEFS, AND IDEAS.APPENDIX 3

Letter from NJASL President

NJASL Letterhead

Name: Judith Everitt

President of NJASL

Date

Title of Study: New Jersey School Library Survey
Phase 2: ONE COMMON GOAL: STUDENT LEARNING

This letter confirms that the New Jersey Association of School Librarians (NJASL) grants authorization for the Center for International Scholarship (CISSL) at Rutgers University to recruit members and gain access to their various schools in order to undertake Phase 2 of the New Jersey School Library Study: One Common Goal: Student Learning. This study, being conducted by CISSL on our behalf, involves school-based focus groups. Members of NJASL who participated in Phase 1 of this research (now completed) have been chosen to participate in focus groups of their schools. The selection process, based on an analysis of survey data in Phase 1 of this research was undertaken by the NJASL-CISSL advisory board as stipulated in the IRB application.   NJASL also authorizes the release of any data that are collected in the school of NJASL members by CISSL, in accordance with the appropriate confidentiality requirements.

Yours faithfully
Judith Everitt
President
New Jersey Association of School Librarians